

Scheer PAS

The Application Composition Platform

11.05.2023

Mit Application Composition zum Composable Enterprise

„Wie Integration, Process Automation und Low-Code Development zukünftig in einer Plattform zusammenwachsen“

The Wind That Drives The Trends

Pandemic

Supply Chain

Great
Resignation

Deglobalization

War

Energy

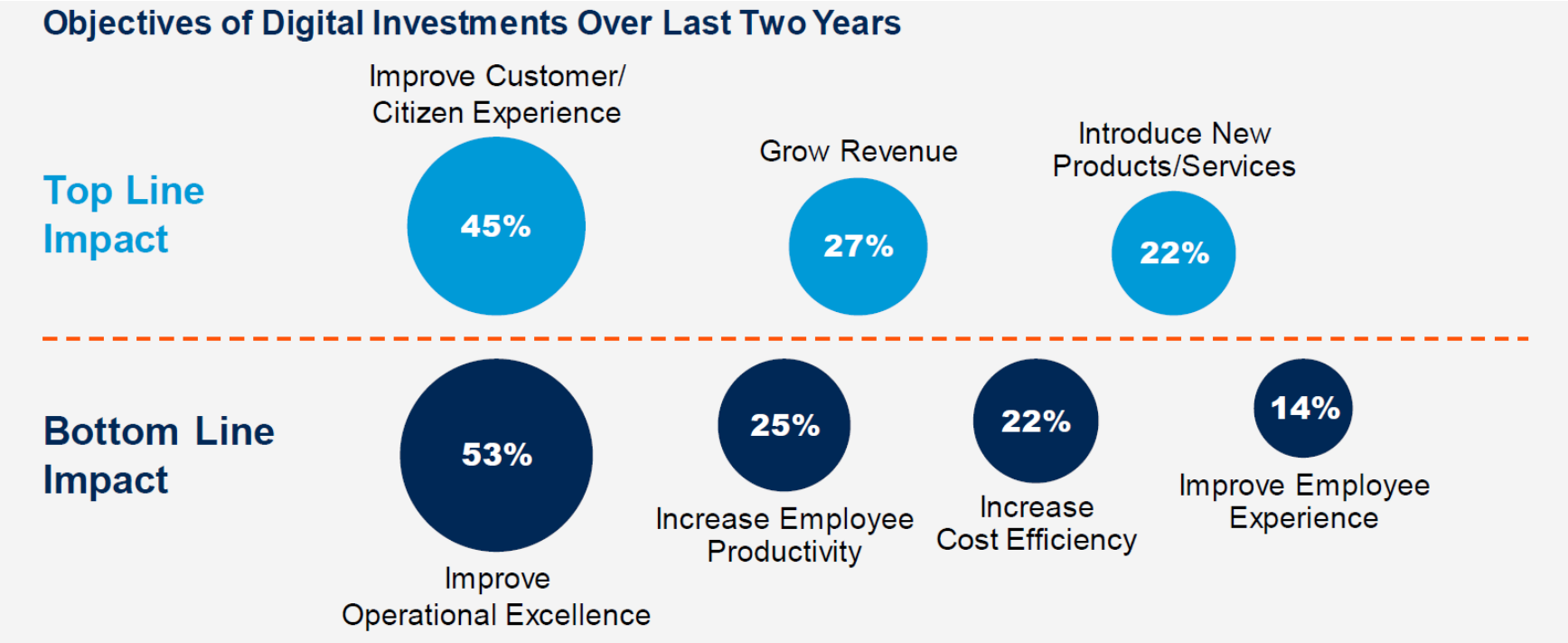
Skill Shortage

Inflation

Climate

Economic
Uncertainty

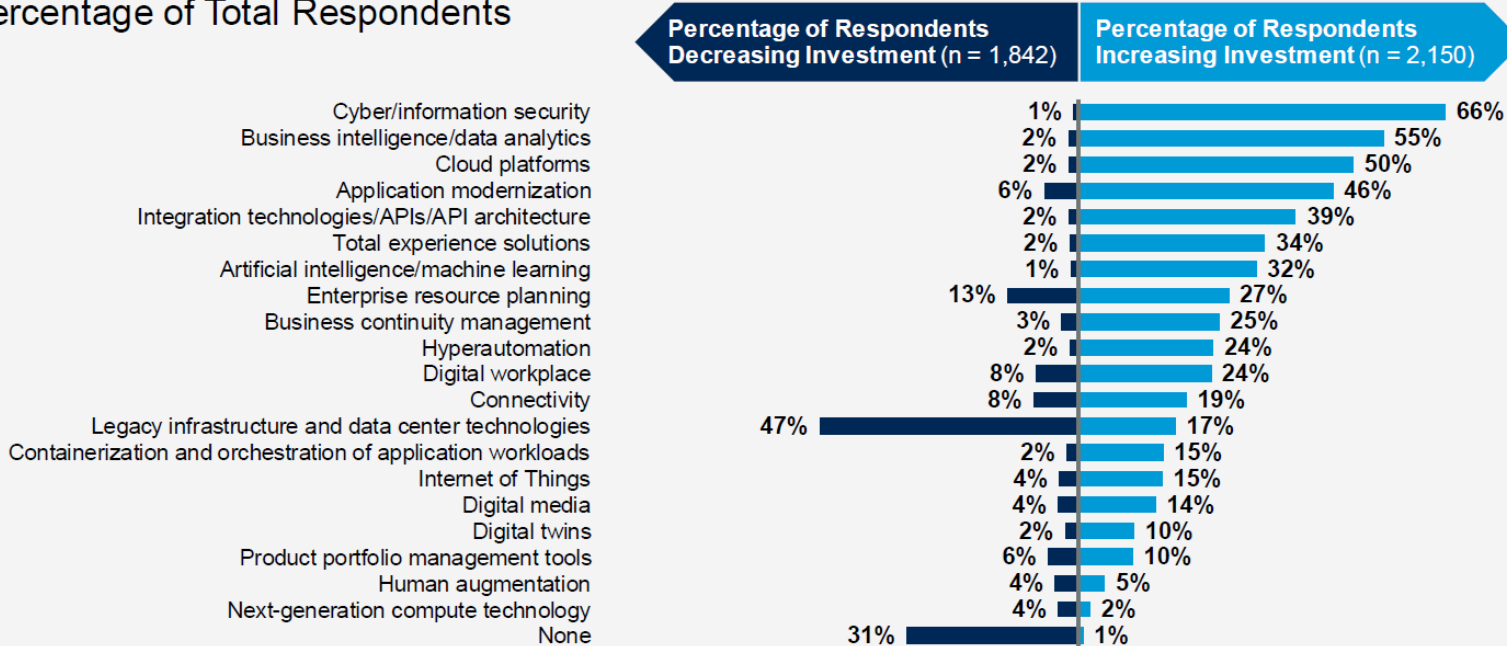
Primary Enterprise's Technology Investments



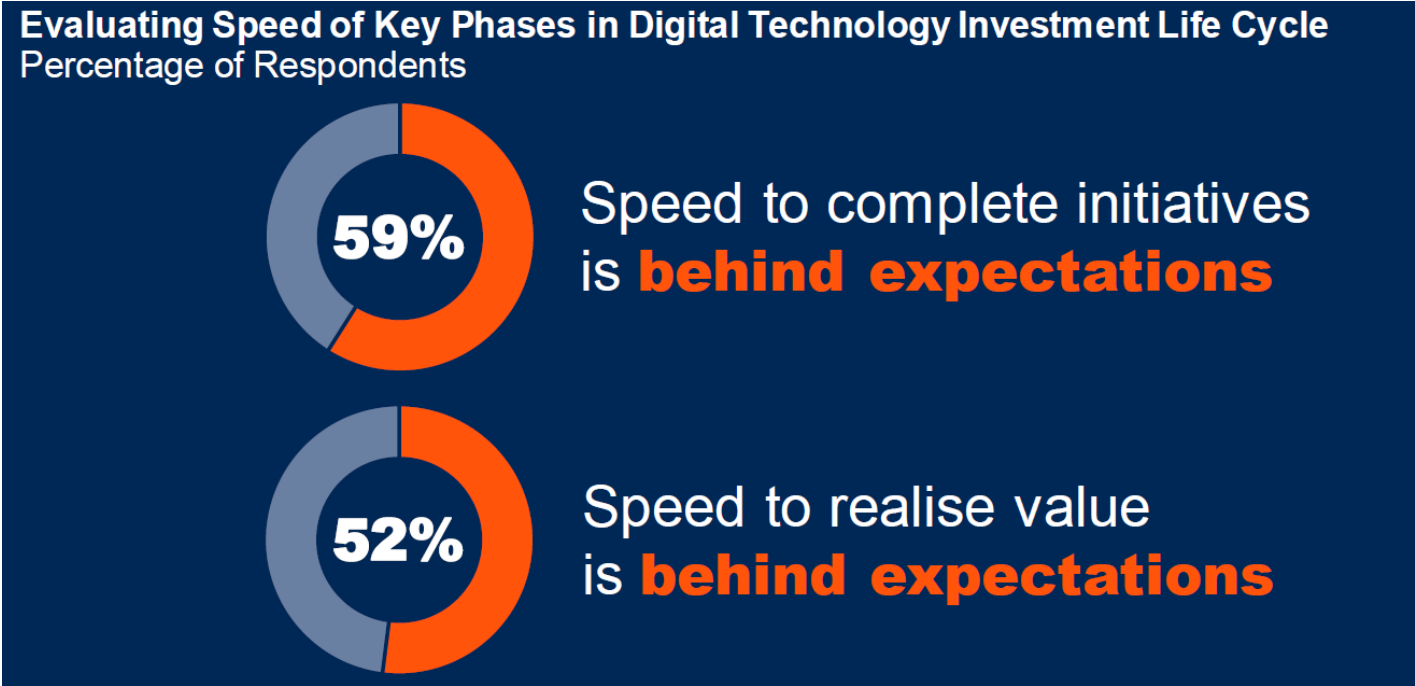
n = 2,200 CIOs and technology executives answering, excluding "not sure"

Technology Investments 2022 vs. 2023

Changes in Technology Investments Percentage of Total Respondents



Most Digital Initiatives Are Delivered Late



The Situation: Business Applications

Unternehmen sind durch traditionelle, umfassende Anwendungen überlastet worden.

Ihre Größe, Komplexität, unflexible Benutzerführung und interne Verflechtung führen zu einem monolithischen Effekt.

Hohe Kosten, schwer zu pflegende Anpassungen und langsame Innovation sind allesamt Hindernisse auf dem Weg zum digitalen Unternehmen.

Digital Needs

In der digitalen Welt ist die wichtigste Fähigkeit in jedem Unternehmen:

Managing Change

(sich schnell an neue Geschäftsbedingungen anpassen)

Die wichtigste Fähigkeit jeder Unternehmenstechnologie ist:

Agility & Adaptability

(schnelle Montage und Wiedermontage von business assets)

The Composable Enterprise

Ein Composable Enterprise ist eine Organisation, die in der Lage ist, schnell auf veränderte Geschäftsanforderungen zu reagieren..

Diese schnelle Anpassung basiert auf dem Zusammensetzen und Wiederaussetzen kleinerer unabhängiger Anwendungskomponenten (Composable Applications).

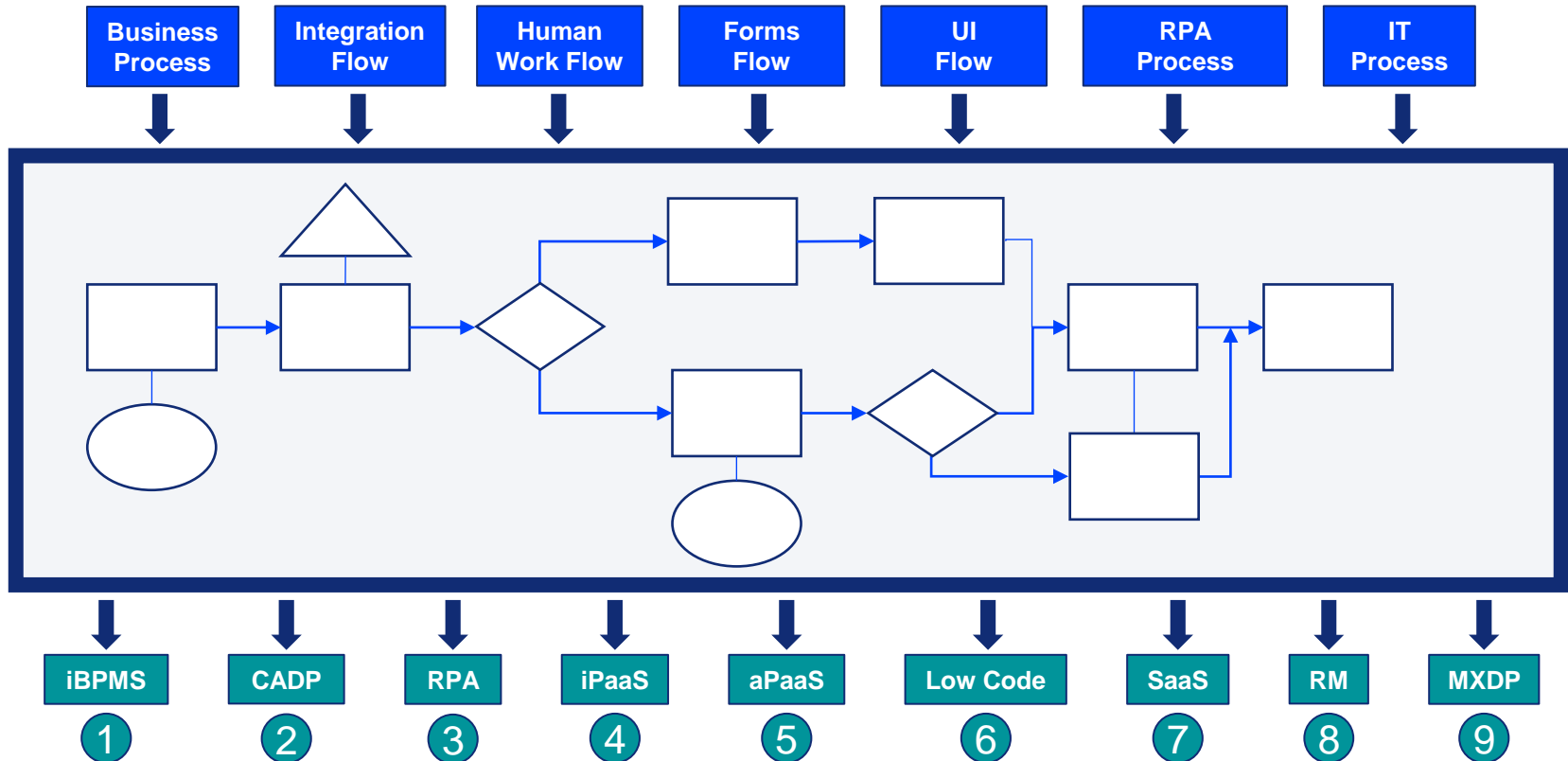
Composable Business Begins With a Changing Mindset

Traditional Thinking

New Mindset

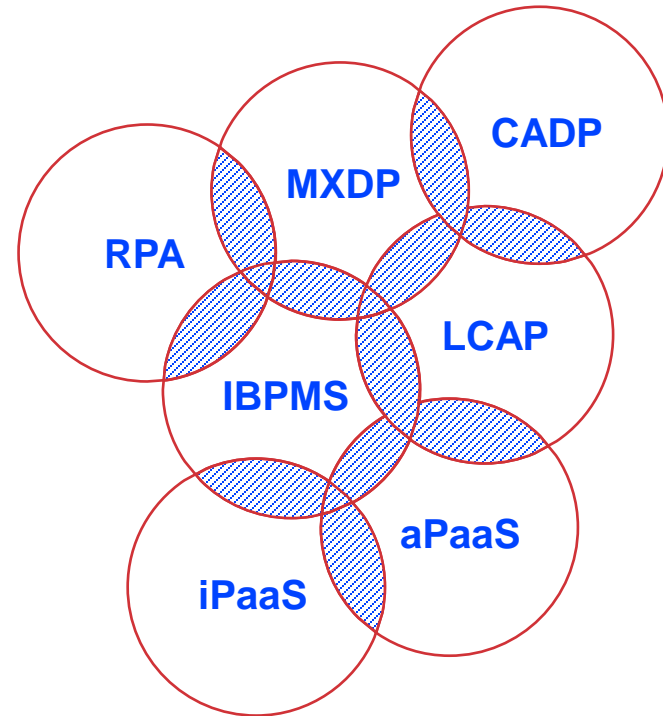
Shadow IT	✓	Fusion Teams
Change is a problem	✓	Change Is A Solution
Applications as solutions	✓	Applications As Platforms
Reactive posture	✓	Proactive Posture

Too many tools for the same process

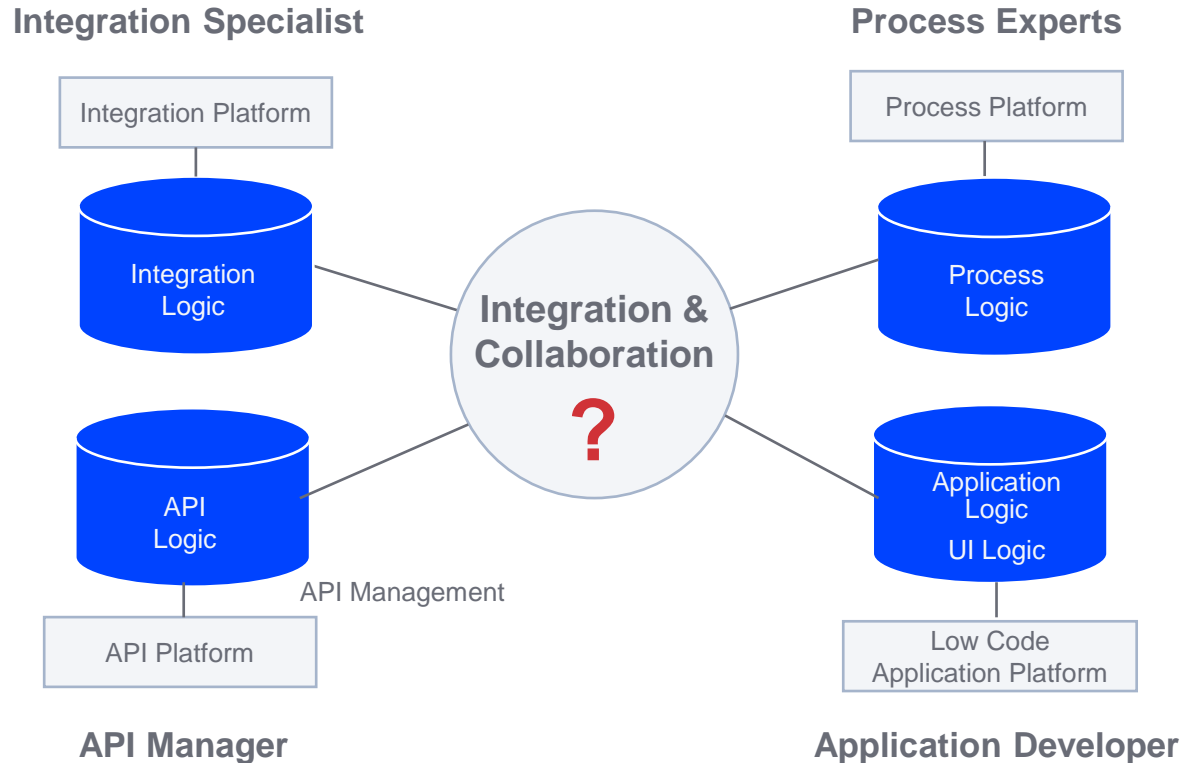


Why

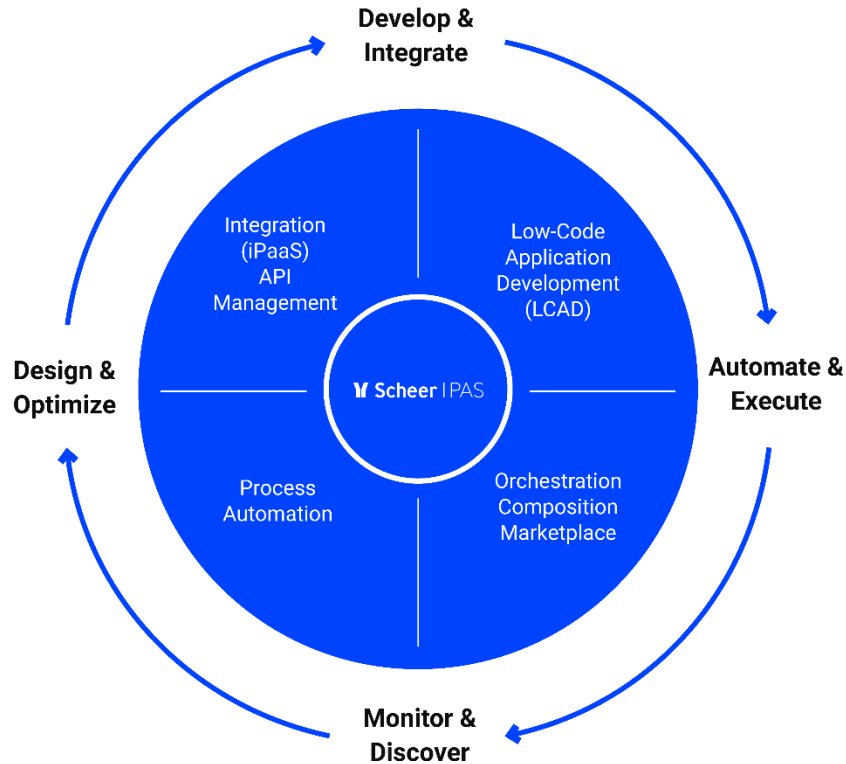
- MXDP:** Multi-Experience Development Platforms
- IBPMS** Integrated Business Process Management Systems
- iPaaS:** Integration Platform as a Service
- LCAP:** Low-Code Application Platform
- aPaaS:** Application Platform as a Service
- CADP:** Citizen Automation and Development Platform
- RPA:** Robotic Process Automation



■ The Situation: Application Infrastructure



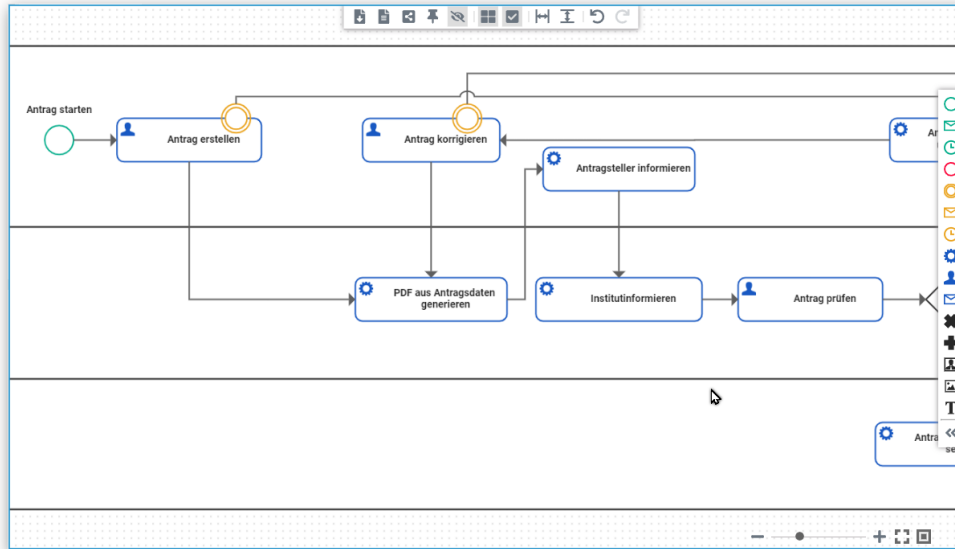
■ Scheer PAS



- One Platform to build Integration, Applications and Process Automation with one Process Oriented Low-Code Experience.
- We empower Business and IT to react to uncertain change in a faster way. Business and IT are working together in Fusion Teams.
- Value
 - Faster Reaction
 - Business oriented Digital Outcome
 - Better Time-To-Market
 - Lower Maintenance Costs

From Low-Code to Pro-Code

From Model to Execute

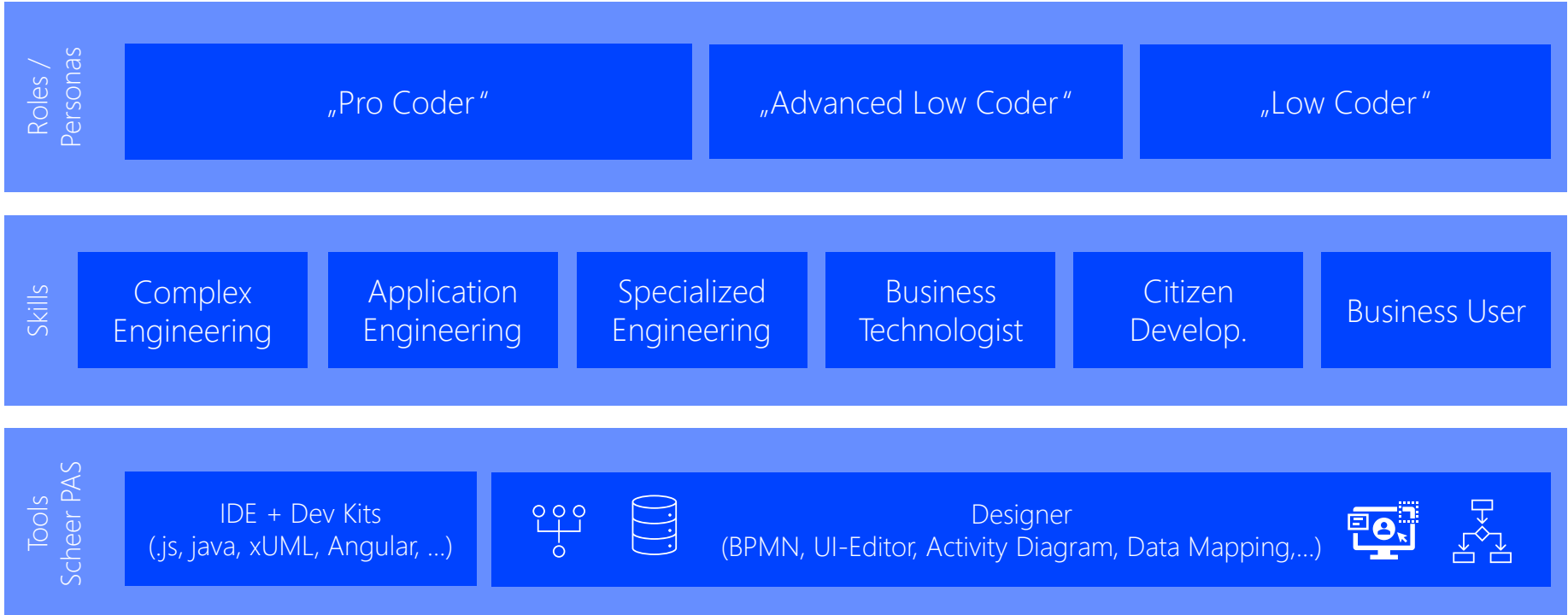


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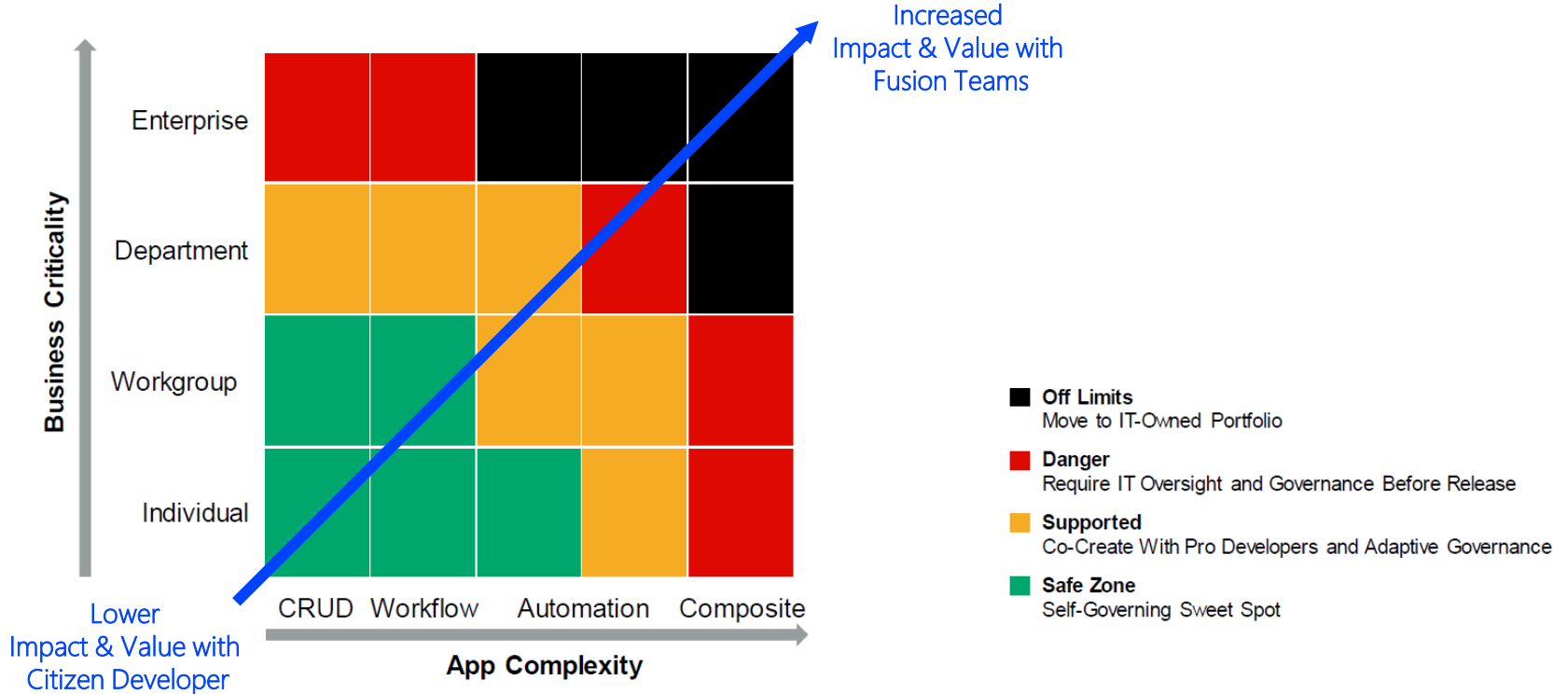
1 import { Component, OnInit } from '@angular/core';
2 import { ActivatedRoute, Router } from '@angular/router';
3 import { combineLatest } from 'rxjs';
4 import { NotificationService } from '@pas/app-core';
5 import { ProcessService } from '@pas/xuml-communication';
6
7 @Component({
8   templateUrl: './default.component.html'
9 })
10 export class DefaultComponent implements OnInit {
11   public processName = '';
12   public instanceId = '';
13   public taskName = '';
14   public overviewLink: string;
15
16   private timeout: any;
17
18   constructor(
19     private route: ActivatedRoute,
20     private router: Router,
21     private process: ProcessService,
22     private notification: NotificationService
23   ) {
24     this.router.onSameUrlNavigation = 'reload';
25   }
26
27   ngOnInit() {
28     combineLatest([
29       this.route.params,
30       this.route.data
31     ])
32     .subscribe(data => {
33       const merged = [...data[0], ...data[1]];
34       this.processName = merged.processName;
35       this.taskName = merged.taskName;
36       this.instanceId = merged.instanceId;

```

From Low Code to Pro Code with Fusion Teams



Low-Code: Get the most out of it!



Fusion Teams

IT

-  Integration Developer
-  UI Developer
-  Dev-Ops-Sec

Business

-  Business Technologist
-  Business Employee
-  Process Expert



- Simple
- Fast
- Flexible

- Are multidisciplinary teams
- Formed by a blend of business roles and technology roles
- Develop a product or a project for a period of time
- Organized by outcomes, not by business functions

Application Types



Process driven



Document driven



Workflow driven



Event driven



Task driven



Data driven



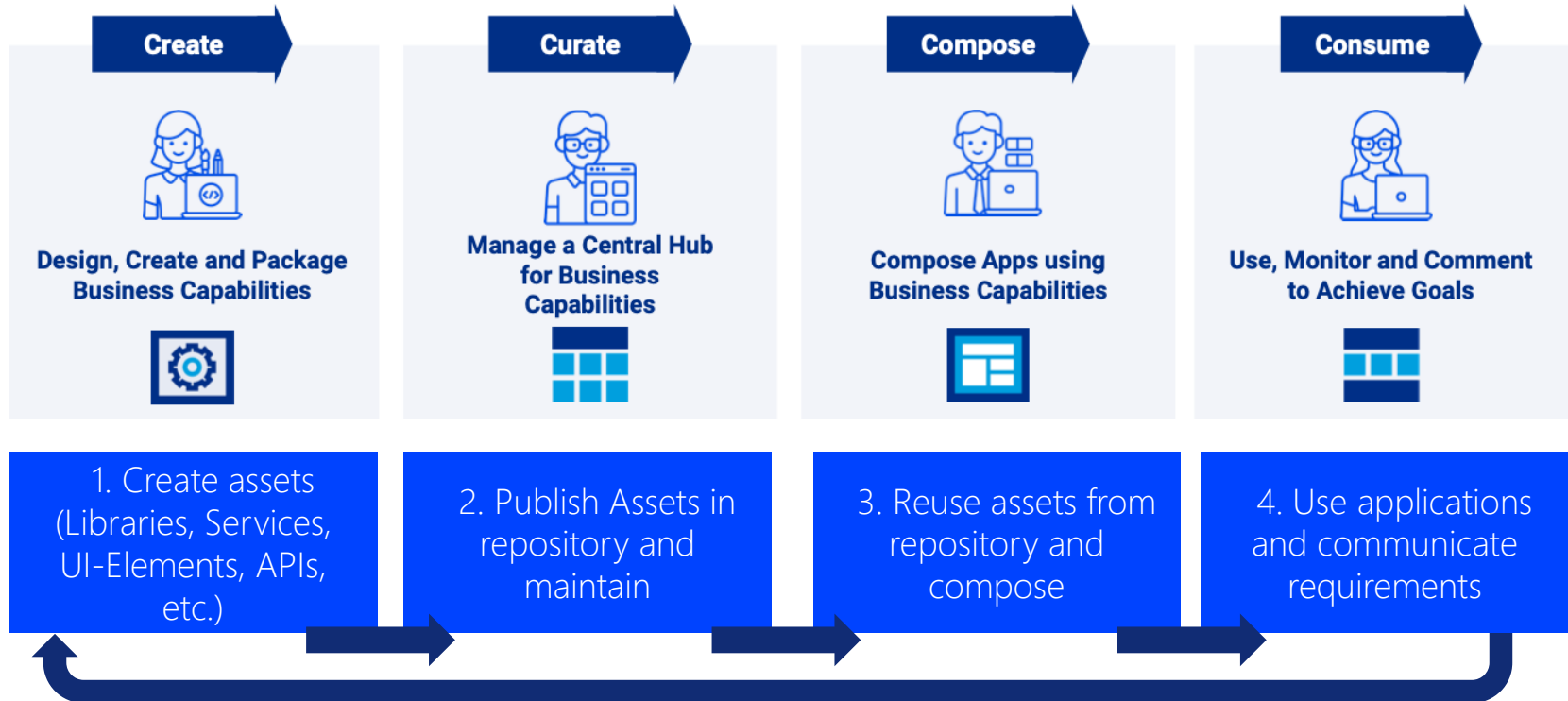
UI/Forms driven



Integration driven

All Application Types in One Platform

The Application Composition Process



Brückenschlag zwischen Business und Digital

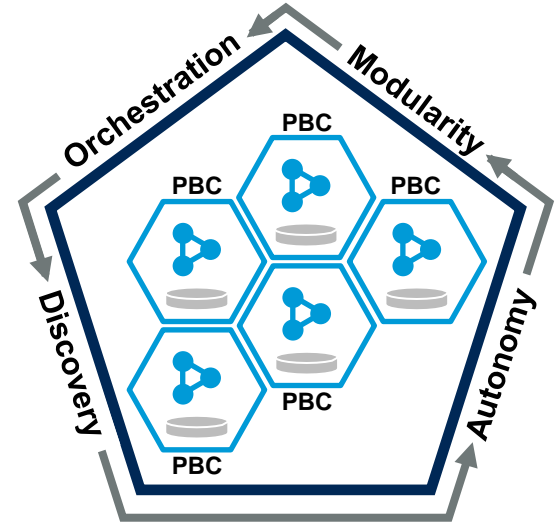
Composable Business



“Digital Twin”



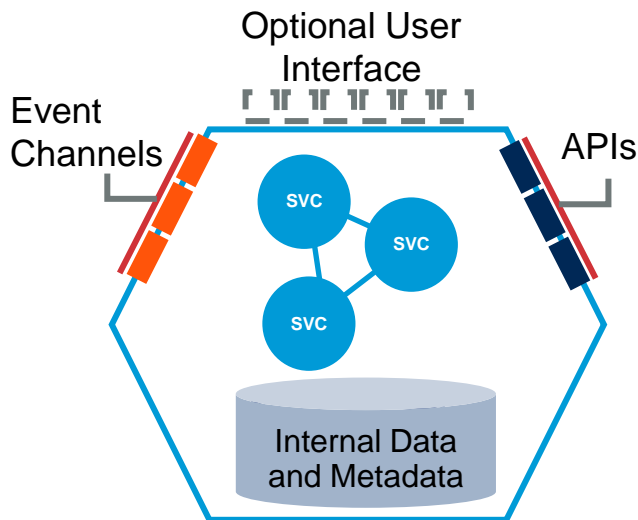
Composable Applications



Packaged Business Capabilities (PBCs) sind gekapselte Softwarekomponenten, die eine klar definierte Geschäftsfähigkeit darstellen, die als solche für einen Geschäftsanwender erkennbar und für den programmatischen Zugriff verpackt ist.

Software Architecture Evolves to Business

Capabilities



Packaged business capabilities (PBCs) are encapsulated software components that represent a well-defined business capability, recognizable as such by a business user and packaged for programmatic access.

Key Types of PBCs

Encapsulated Business Object

- (e.g., Account Management, Purchase Order Management)

Process Management

- (e.g., Order-to-Cash, Credit Approval)

Digital Twin

- (e.g., Turbine Management, Elevator Management)

Data Reference

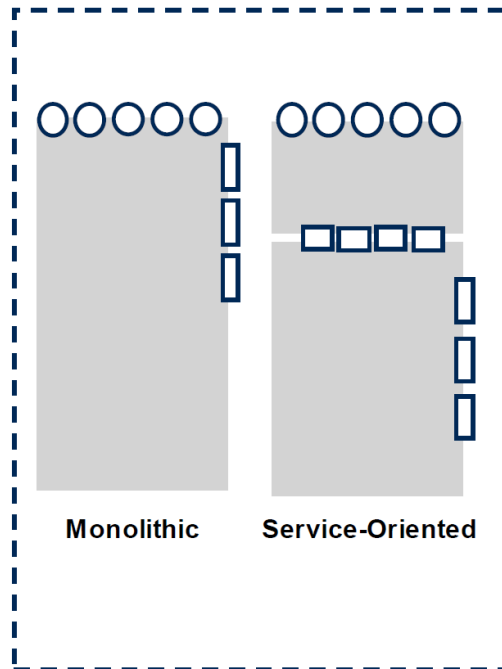
- (e.g., Exchange Rate Lookup, Keyword Search)

Analytical Insight

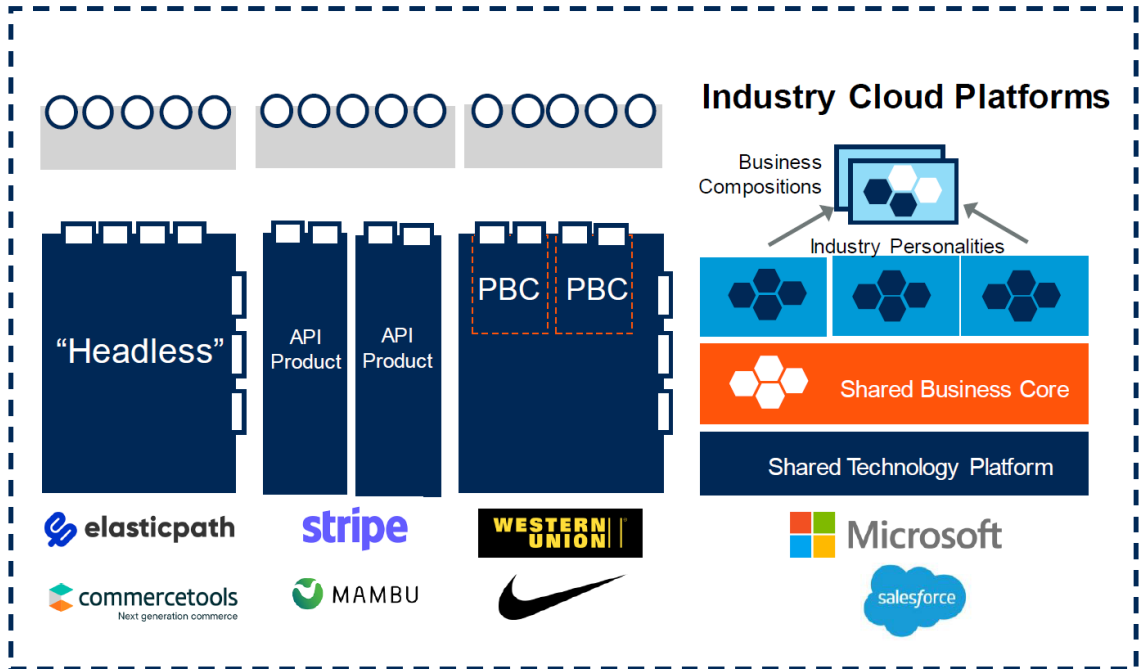
- (e.g., Sentiment Analysis, Credit Assessment)

Composable Applications As Digital Platforms

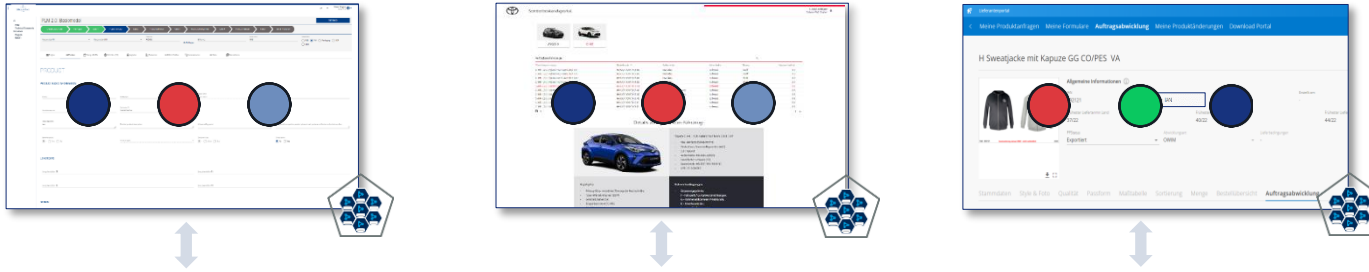
Traditional Delivery: Applications Are Packaged Business Solutions



Next Era: Applications Are Digital Platforms For Continuous Business Innovation

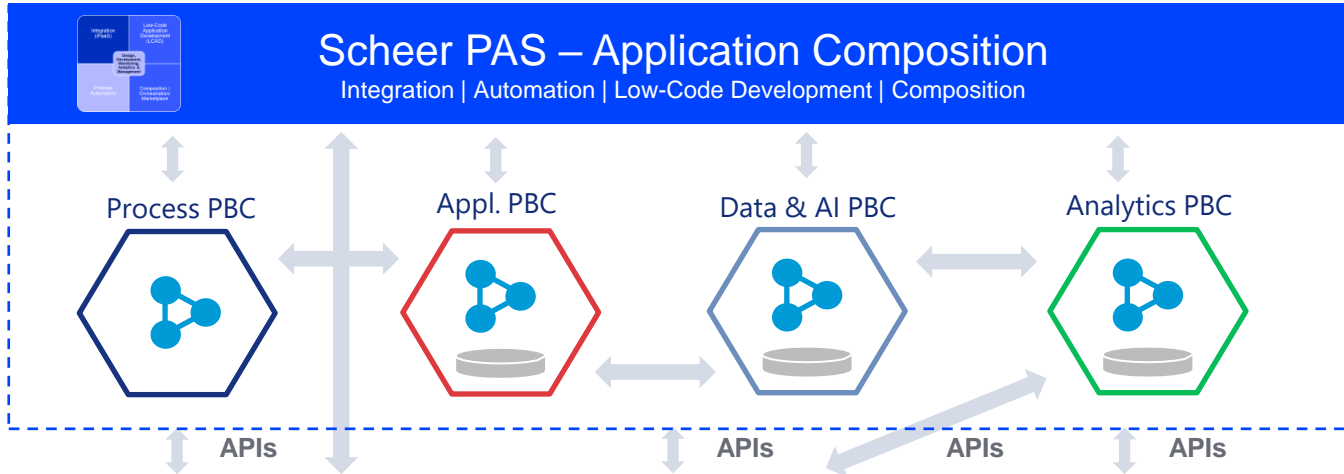


Differentiation



**Digital Experience
(Composition)**

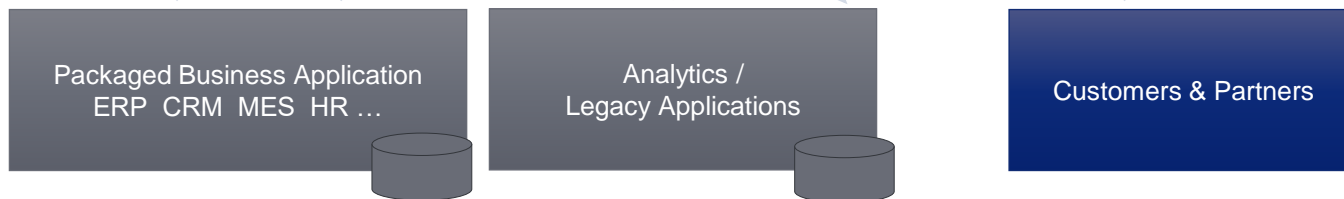
Agility & Speed



Digital Layer

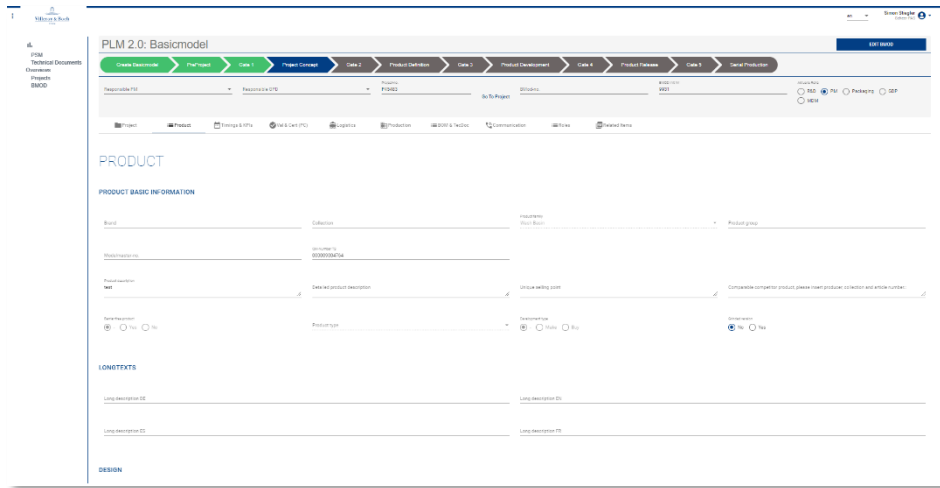
**Individual & Shared
Business
Capabilities**

Stability



**Source & Destination
Backend Layer**

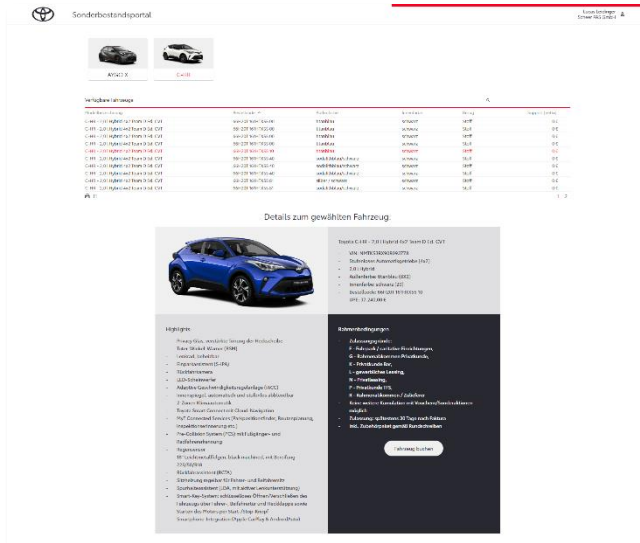
Composable Applications



Product Development Process

- Existing heterogenous IT-Landscape (SAP, TeamCenter, CAD, PIM, ...)
- E2E process breaks & bad UX
- Differentiation & changing business
- No suitable solution on the market

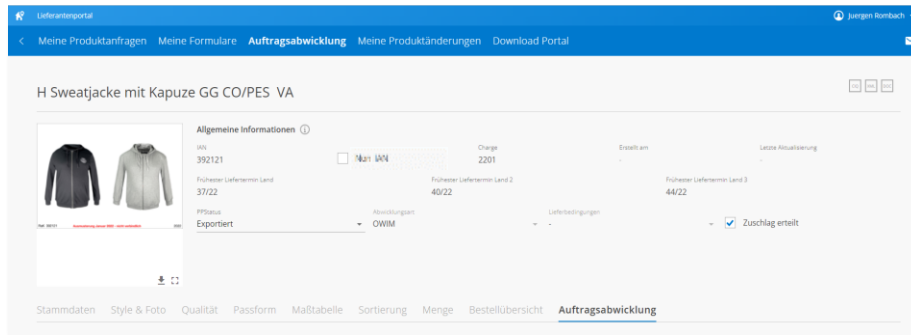
Composable Applications



Dealer Vehicle Management

- Existing Heterogenous IT-Landscape (SAP, nonSAP, Individual Code)
- E2E process breaks & bad UX
- Failed project
- Differentiation & changing business trough EV transformation

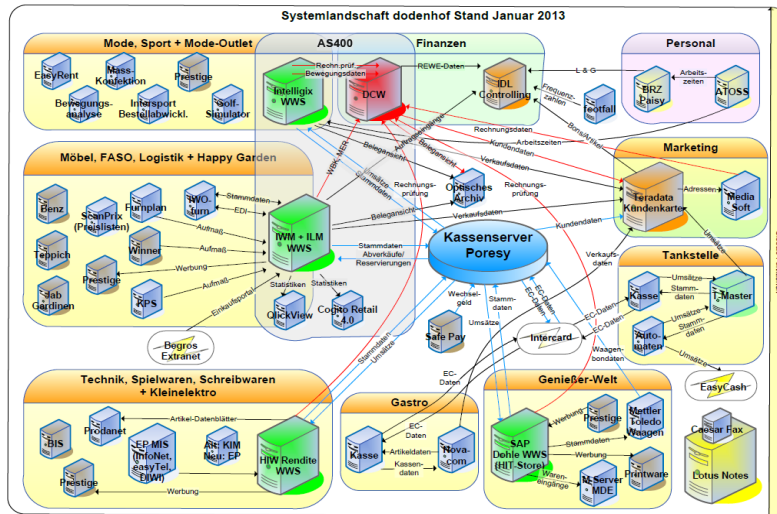
Composable Applications



Non-Food Vendor Portal

- Industry Solution was not enough
- High tailored, differentiative, mission critical and global processes
- Existing heterogenous IT-Landscape (SAP, nonSAP, Individual Code)
- E2E process breaks, manual work & bad UX

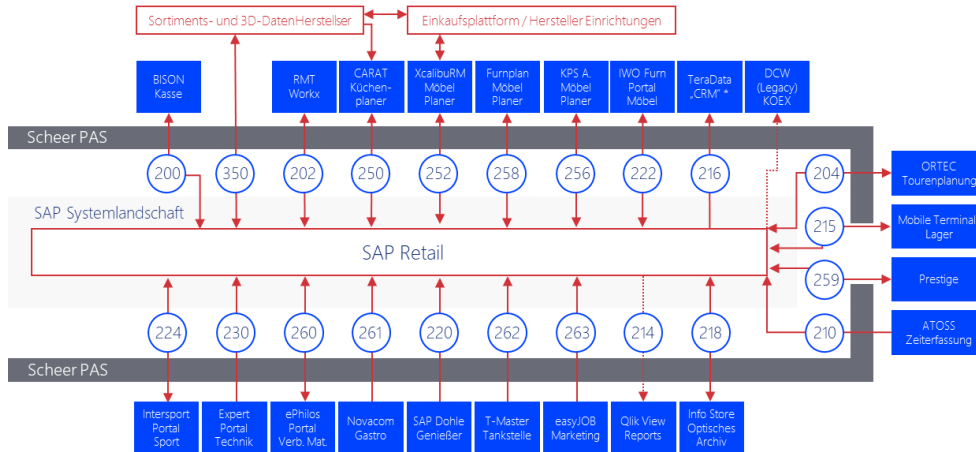
Composable Applications



Legacy Modernization

- Legacy modernization
- Corona threatened the business
- Sales Channel connectivity (Zalando, Amazon, ...)
- Drop shipping / Wholesale
- Transformation to a Platform Company

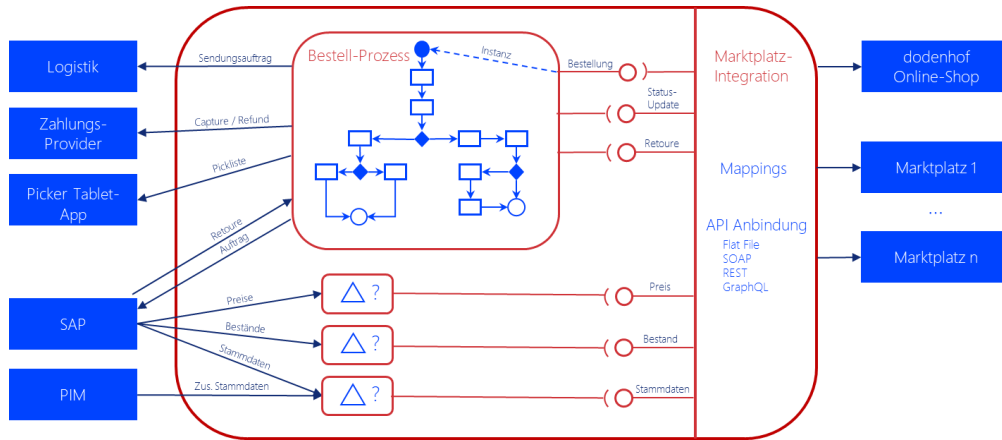
Composable Applications



- Legacy modernization
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Legacy Modernization → SAP Implementation

Composable Applications



Omnichannel → Platform Company

- Legacy modernization
- Corona threatened the business
- Sales Channel connectivity (Zalando, Amazon, ...)
- Drop shipping / Wholesale
- Transformation to a Platform Company

How does it work?

Scheer | PAS Designer

PAS Testuser
Scheer PAS Deutschland GmbH

SapMaterialDaten

- Base Types
- Connectors
- Process
 - Process_Empty
 - Request_Material
- Forms
 - CheckAvailabilityForm
 - ChooseMaterialForm
 - Form_Empty
 - Materialtable
 - RequestAvailabilityForm
- Implementation

Request_Material

Customer

Start Event

Choose material

Request availability

Exclusive Gateway

Notify Sales

Check availability

Exclusive Gateway

Send order confirmation

End Event

Send material not available message

Send Data

On Exit

Message

message: ChooseMaterialForm

response

getMaterialList

matNumberClass

matNumberString

matNumbertoString

Local

Persisted

materialnumber: String

responseMaterialList: MaterialCollection

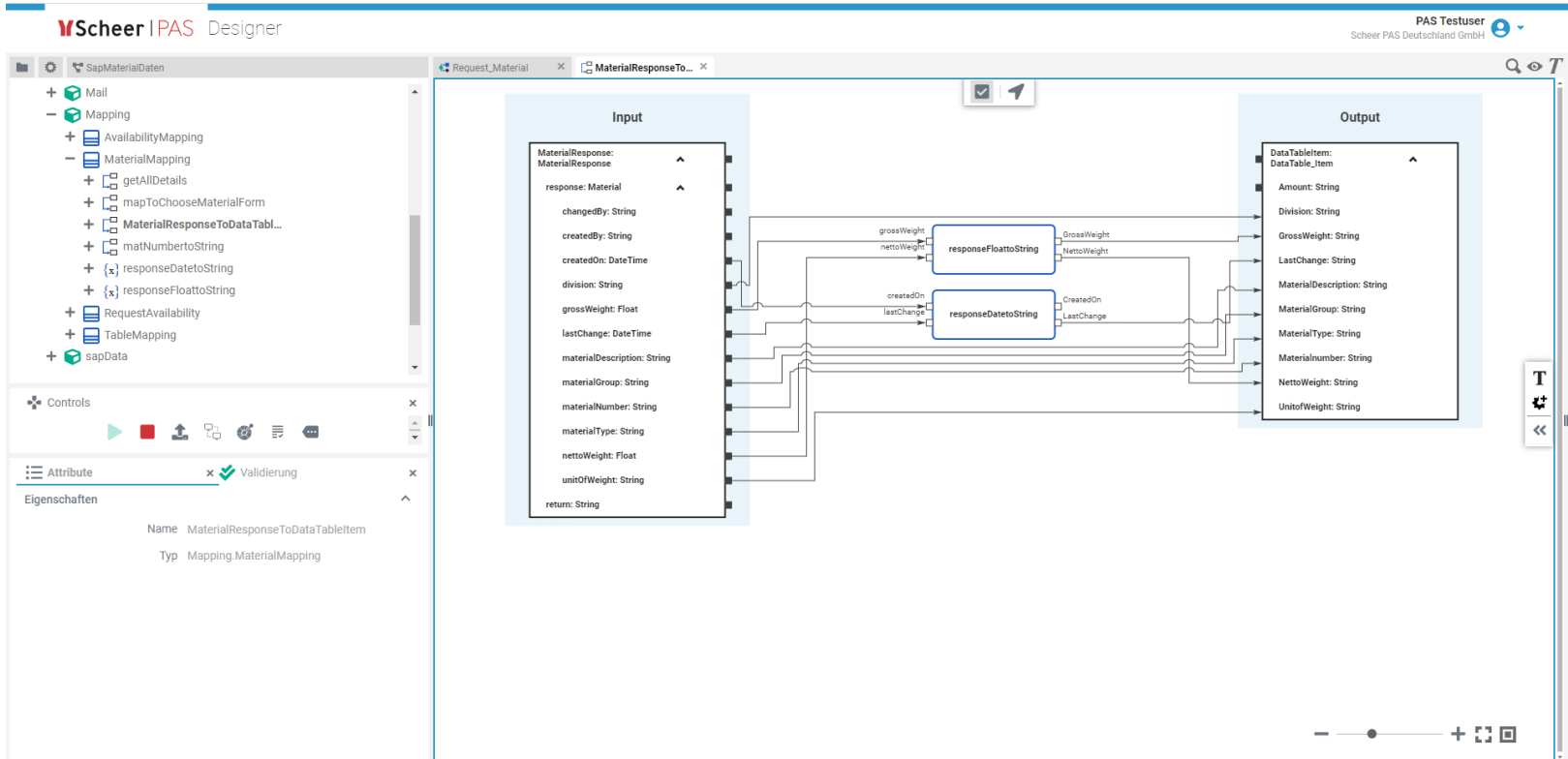
Get Data

On Exit

How does it work?

The screenshot displays the Scheer PAS Designer interface. On the left, a navigation pane shows a project structure with folders for 'Base Types', 'Connectors', 'Process', 'Forms', and 'Implementation'. The 'Forms' folder is expanded, showing several form templates like 'CheckAvailabilityForm', 'ChooseMaterialForm', 'Form_Empty', 'Materialtable', and 'RequestAvailabilityForm'. Below this is a 'Controls' section with various UI element icons. A 'Properties' pane is open for the selected 'CheckAvailabilityForm', showing its name and a note: 'CSS Klasse Geben Sie einen Text ein.' The main workspace shows a form titled 'Order information' with various input fields and buttons. The form includes a 'Materialnr.' field, a 'Reavailable at:' field, a 'Deliverable to:' field, a 'FormTextArea', and a 'FormDatePicker'. At the bottom, there are two buttons: 'Decline' and 'Accept'. The top of the interface shows the 'SapMaterialDaten' project name and several open tabs for different form components. The top right corner indicates the user is 'PAS Testuser' from 'Scheer PAS Deutschland GmbH'.

How does it work?



Key Takeaways

Composable Thinking is the starting point.

Integration, Process, Automation, Application Development, ... are becoming one seamless capability.

Low-Code is an experience

APIs will rule the world

Fast Assembly & Reassembly of Business & Application Assets is important

Packaged Applications are no longer solving the problems of the future.

Applications must become Platforms.

IT departments can't solve it alone.

Embrace your Business Technologist & Citizen Developers.

Composability is a team sport.

Use the Energy of Disruption As The Fuel For Innovation and Growth



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Call To Action



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