



MEF.DEV

Digital Transformation

Open API Platform



Powering the Digital Transformation

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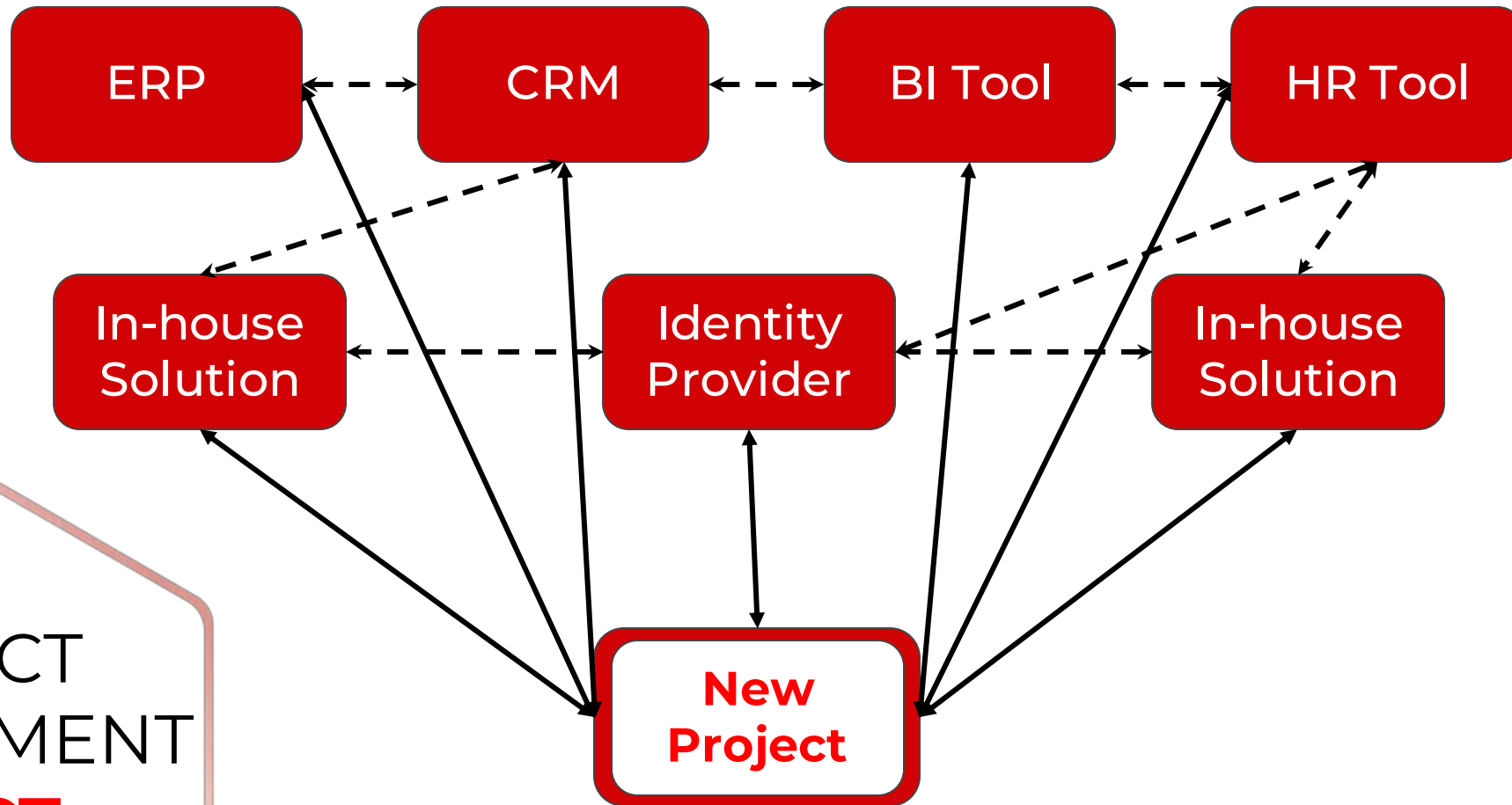
DIGITAL TRANSFORMATION PLATFORM



The serverless MEF.DEV platform provides a **new approach to software development process**, opening a market for standardized, function-oriented software components, and enabling communication service providers and suppliers to invest in IT for new and differentiated services instead of maintenance and integration.

MEF.DEV aims to **transform business agility**: accelerate the concept-to-cash from tens of months to 3 weeks and enable 40% growth in B2B revenue, and double the OpEx efficiency by creating more straightforward IT solutions that are **easier and cheaper to deploy, integrate & upgrade**.



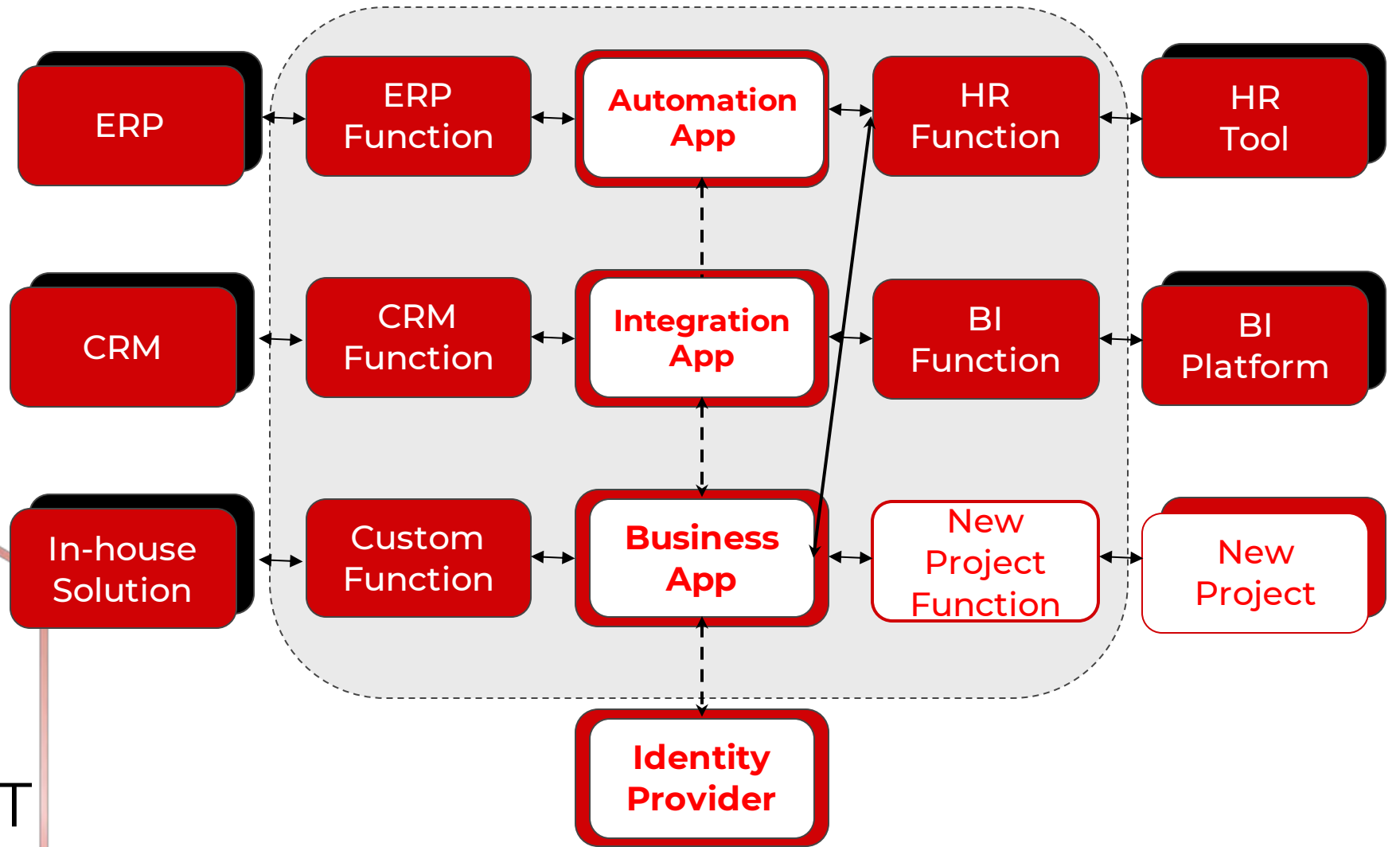


PROJECT
DEVELOPMENT
**IMPACT
ISSUES**

Dependencies are messed up and
the impact assessment is hard to
follow

Direct changes
←————→
Impact (indirect) changes
←-----→

FUNCTION-ORIENTED DEVELOPMENT

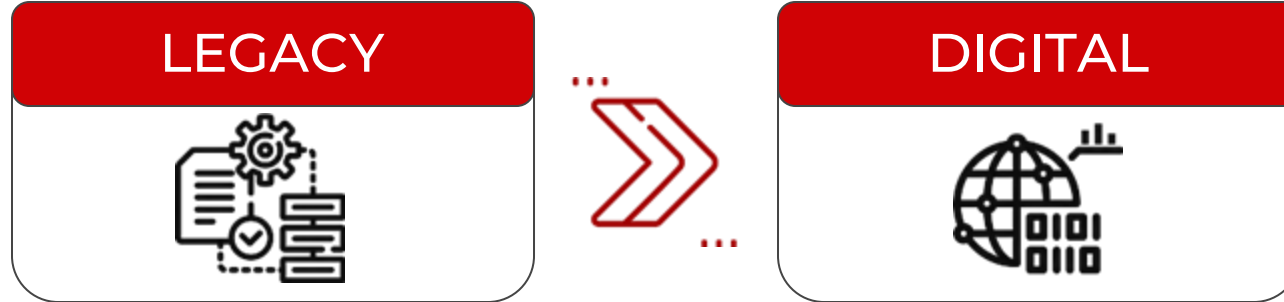


The impact assessment is clear.
Dependencies are easy to follow

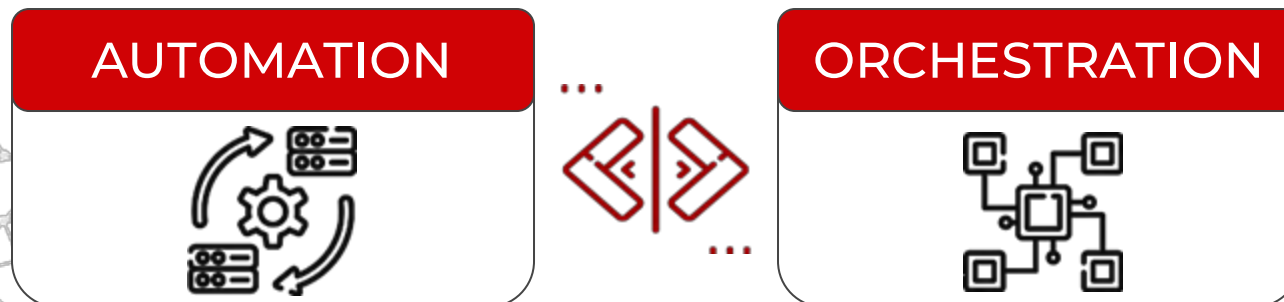
Direct changes
Impact (indirect) changes

SCOPE OF TASKS

Legacy Integration & Smooth Transformation



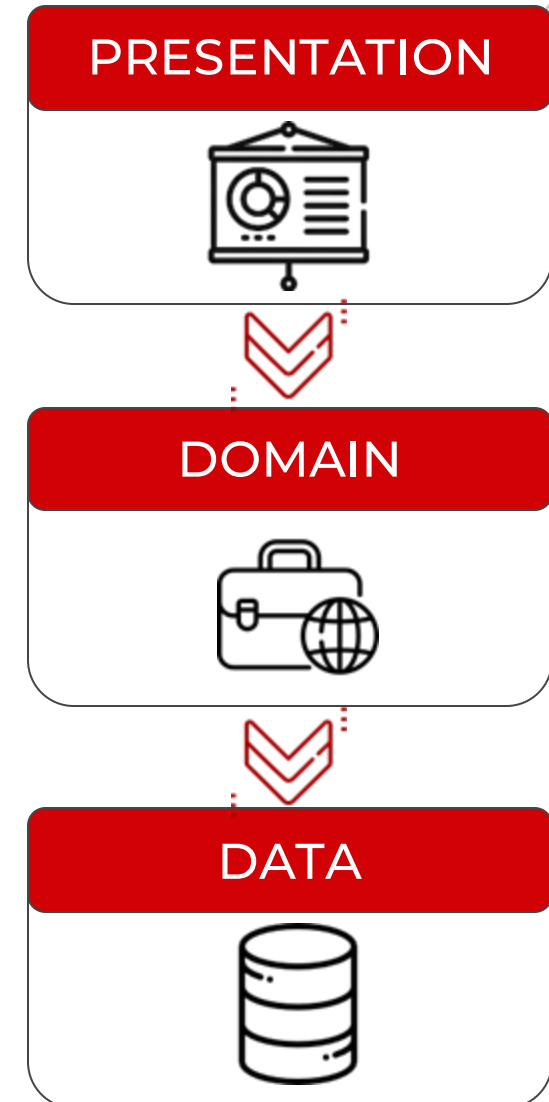
Process Automation & Orchestration



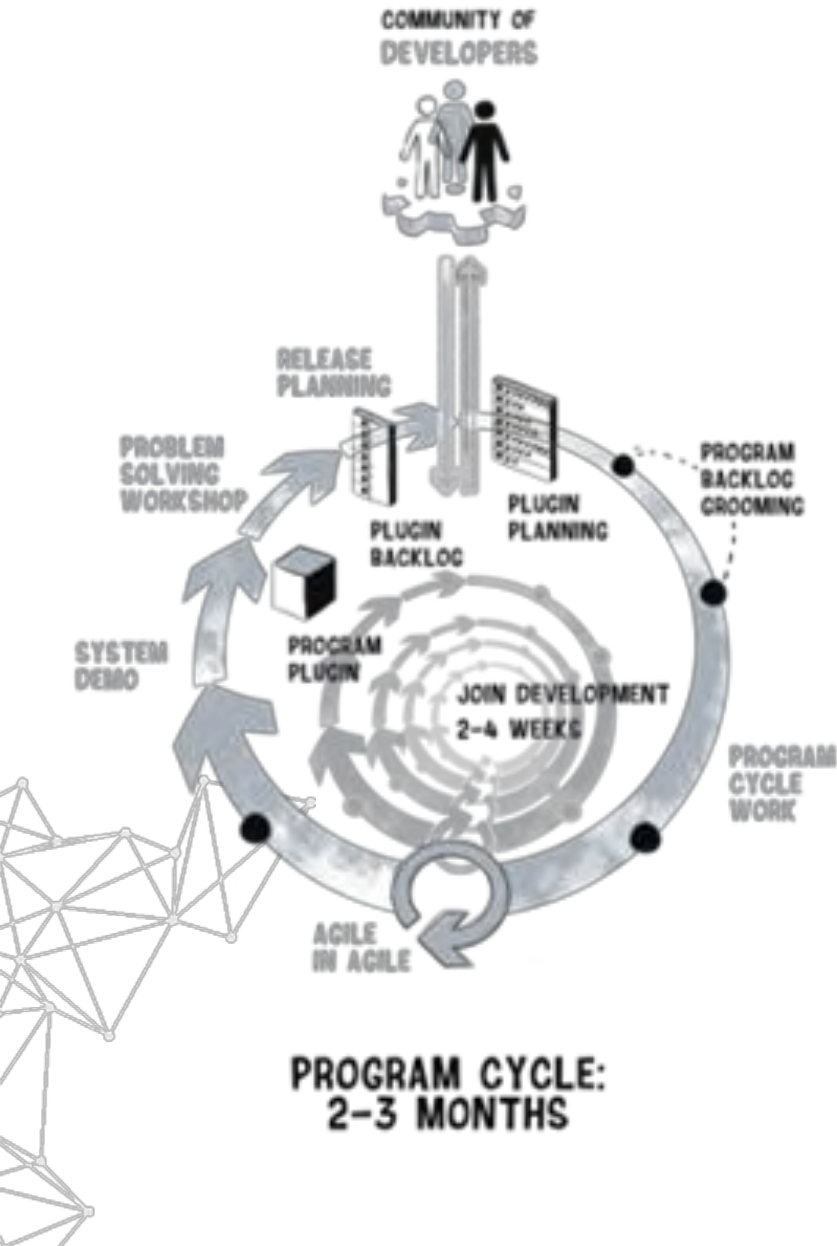
Setting-up and performing a task

Automation of multiple tasks as a process or flow

Business Logic Application



COLLABORATION APPROACH



Internal Team

Defines goals and scopes

Defines features

Crafts requirements

Both teams **do development together**. You orchestrate, create business logic and omnichannel using low-code, while we handle backend, services, and secure your backend IT operations

The **MEF.DEV platform** helps to **generate the code**, do guided delivery and provides hosting and IoC composition. A customer monitors the progress, measures bottlenecks, and requested changes. A smooth rollout includes multi-tenant configuration management, release management (versioning), auto-documentation, and user accounts management

Independently orchestrates changes and leverages future development

External Team

Examines current **business processes** and existing legacy landscape to identify potential transformation plan that meets your business goals

Maps these to security **requirements**, regulations, and proposed technology platforms for custom software development

Keeps an estimated **project schedule** and timelines, and clearly explains costs

Can **provide training and technical support** in several forms to keep your new solution functioning. Respond to reported issues and tackles your further requests

IoC Composition

The MEF.DEV platform provides access to business logic and native data storage. This enables operators to quickly add third-party business logic functions (like a containers) without the need for revision and re-building

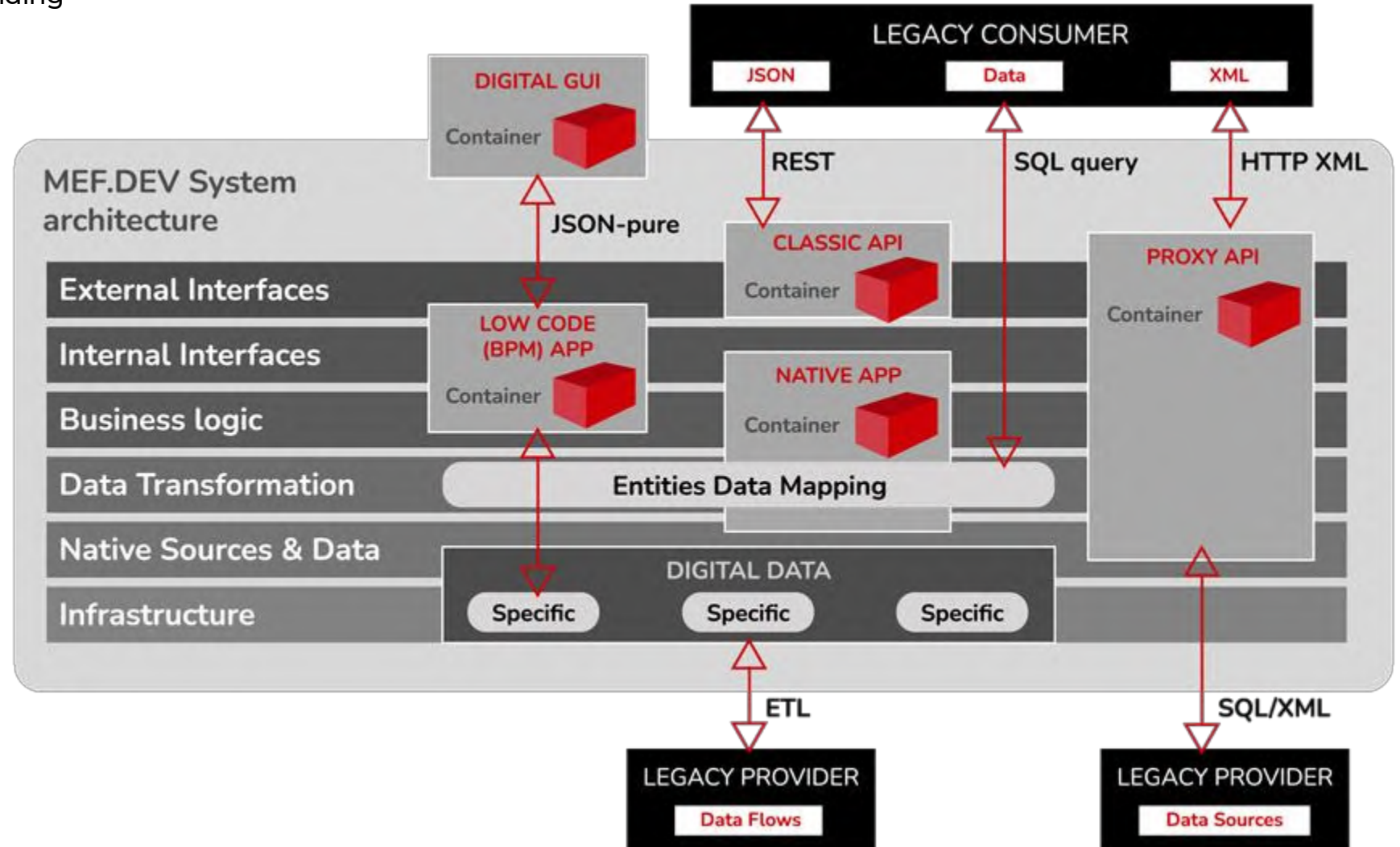
Standardized APIs

The platform exposes auto-generated REST API interfaces which helps extend the functionality of the platform

Smooth DevOps

MEF.DEV adheres to continuous integration process that supports enterprise SDLC processes for code generation, configuration management, versioning support and rollback

Open API Platform Capabilities



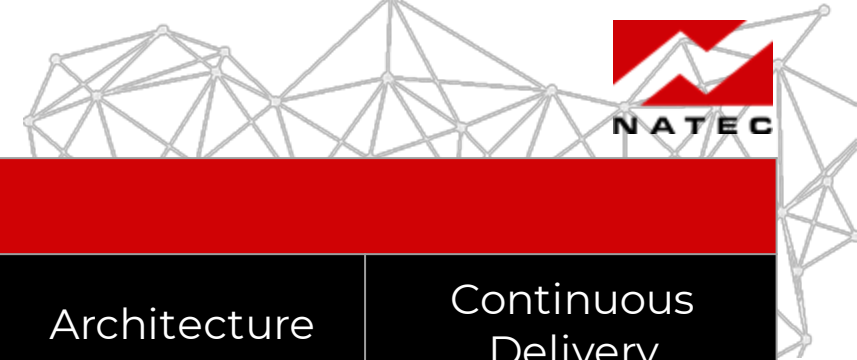
INVERSION OF CONTROL FUNCTION COMPOSITION



Designed Entities & Actions
provide access to business
logic and specific (native)
data interaction using the IoC
Function Composition and
Canonical Data Models



DEVOPS CAPABILITIES COVERAGE



Teams & Layers	DevOps Capabilities				
	Cultural	Lean Management	Product & Process	Architecture	Continuous Delivery
Business owners	Performance-oriented structure	Change of approval Processes	Customers' feedback	Support of learning	
Business analysts	Support of learning		Value stream	Loosely-coupled architecture	Test data management
Developers	Collaboration among teams	Visualization of work	Working in small batches		Version control
Testers			Team experimentation	Empowered teams	Test automation (to be added)
IT Ops		Monitoring			Deployment automation
Storage				Distributed database	
Infrastructure				Serverless	Infrastructure as a code (to be added)

INCLUDED DEVOPS CAPABILITIES



COLLABORATION AMONG TEAMS

Teams build and support knowledge transfer processes, and good documentation

TEAM EXPERIMENTATION

Experimenting, close interaction, and consulting among the developers

EMPOWERED TEAMS

Can raise issues and experiment with new features

VALUE STREAM

Developers understand the impact of changes for an Enterprise

MONITORING

Monitoring is aimed at business values. It is focused on applications and entities usage

DEPLOYMENT AUTOMATION

Comprehensive, 80% automation (may or may not include configuration) - driven by the development team or the operations team

LOOSELY-COUPLED ARCHITECTURE

Abstractions of data VS business rules VS presentation layers

WORKING IN SMALL BATCHES

Feature flags allow using and combining small developer packages into larger features

VISUALIZATION OF WORK

Visible dashboards. Product hierarchy

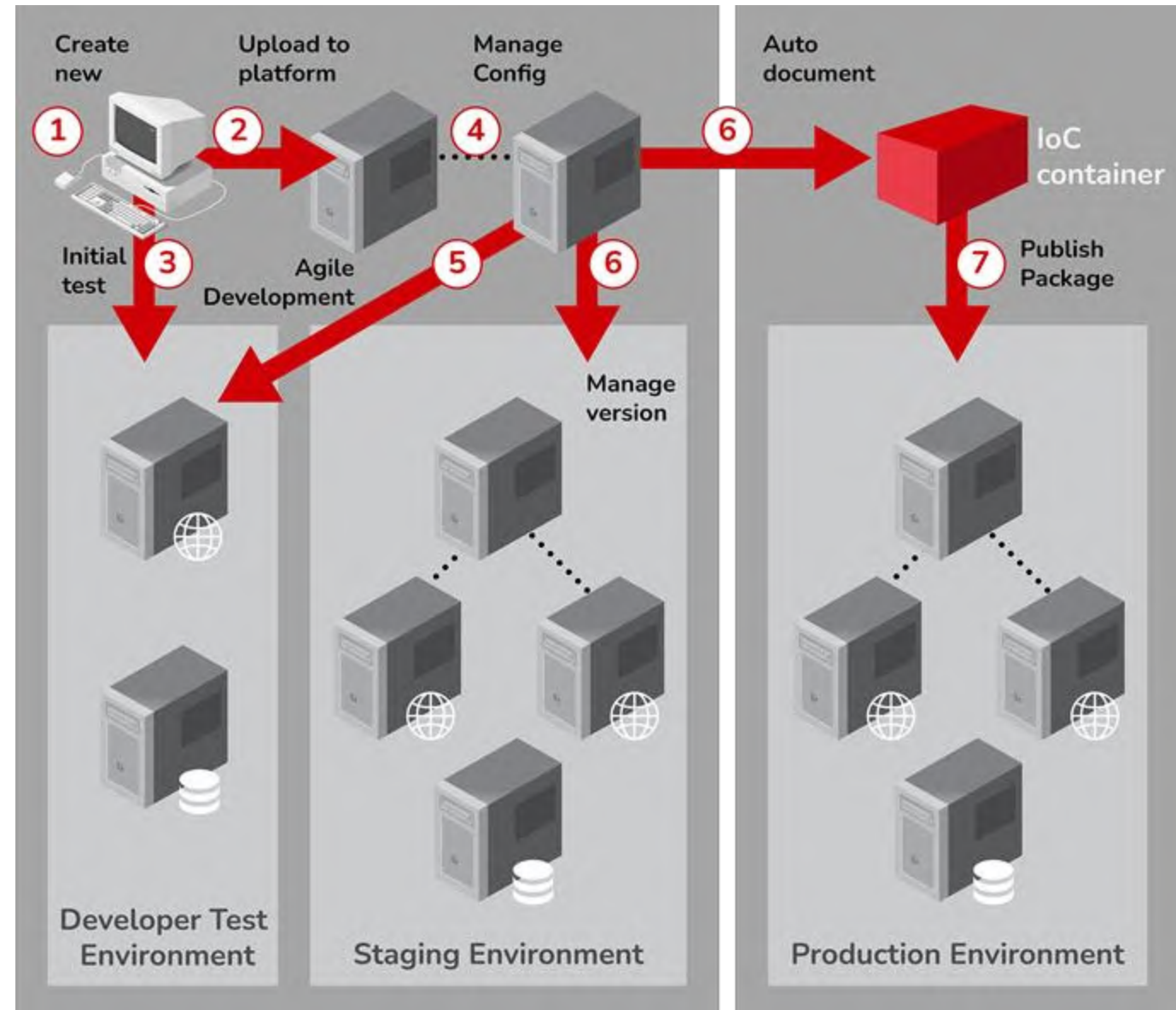


UNIFIED DEVELOPMENT PROCESS



The Developer's 'To-Do' Checklist

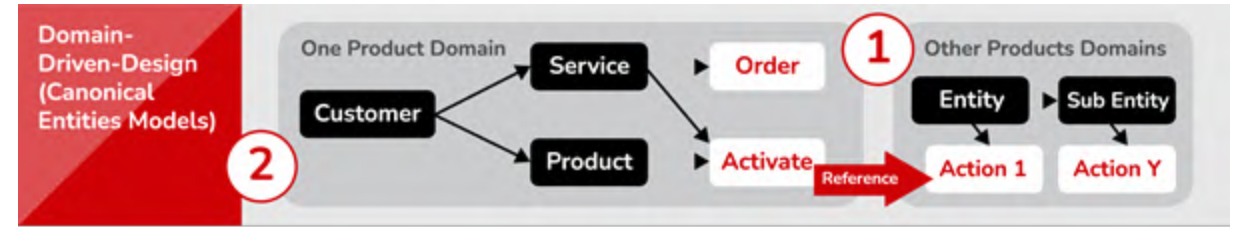
- ✓ **Develop** or auto-generate a new package
- ✓ **Deploy** the first version
- ✓ Do initial **run**
- ✓ Create a **version-dependent** configuration
- ✓ **Create new versions** of solution components in agile mode and deploy to stage environment for E2E and smoke testing
- ✓ **Review** the auto-generated specification before publishing
- ✓ **Publish** the application package to production environment according to the rules of the Change Management Process



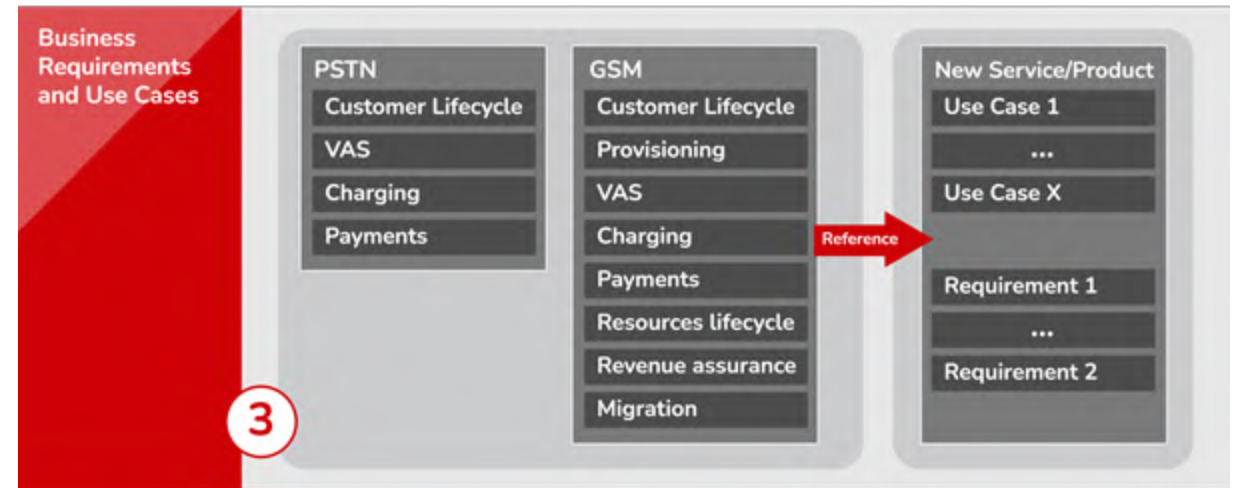
REFERENCE ARCHITECTURE FRAMEWORK



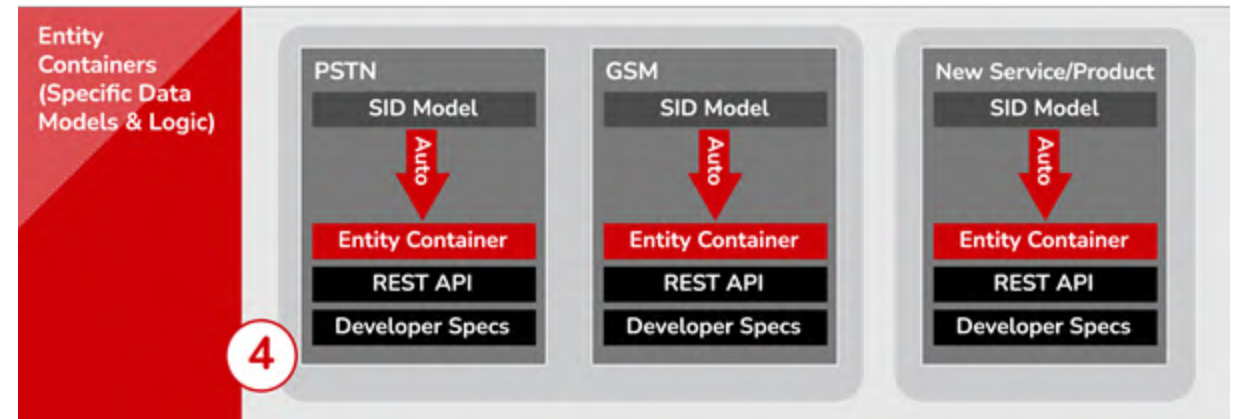
1 Digital transformation begins with the definition and standardization of domain services or products with a domain-driven design.



2 From these services or products definitions, Entities and Action models are developed. They include common types and constructs for further exposition and behavior that span all services and products.



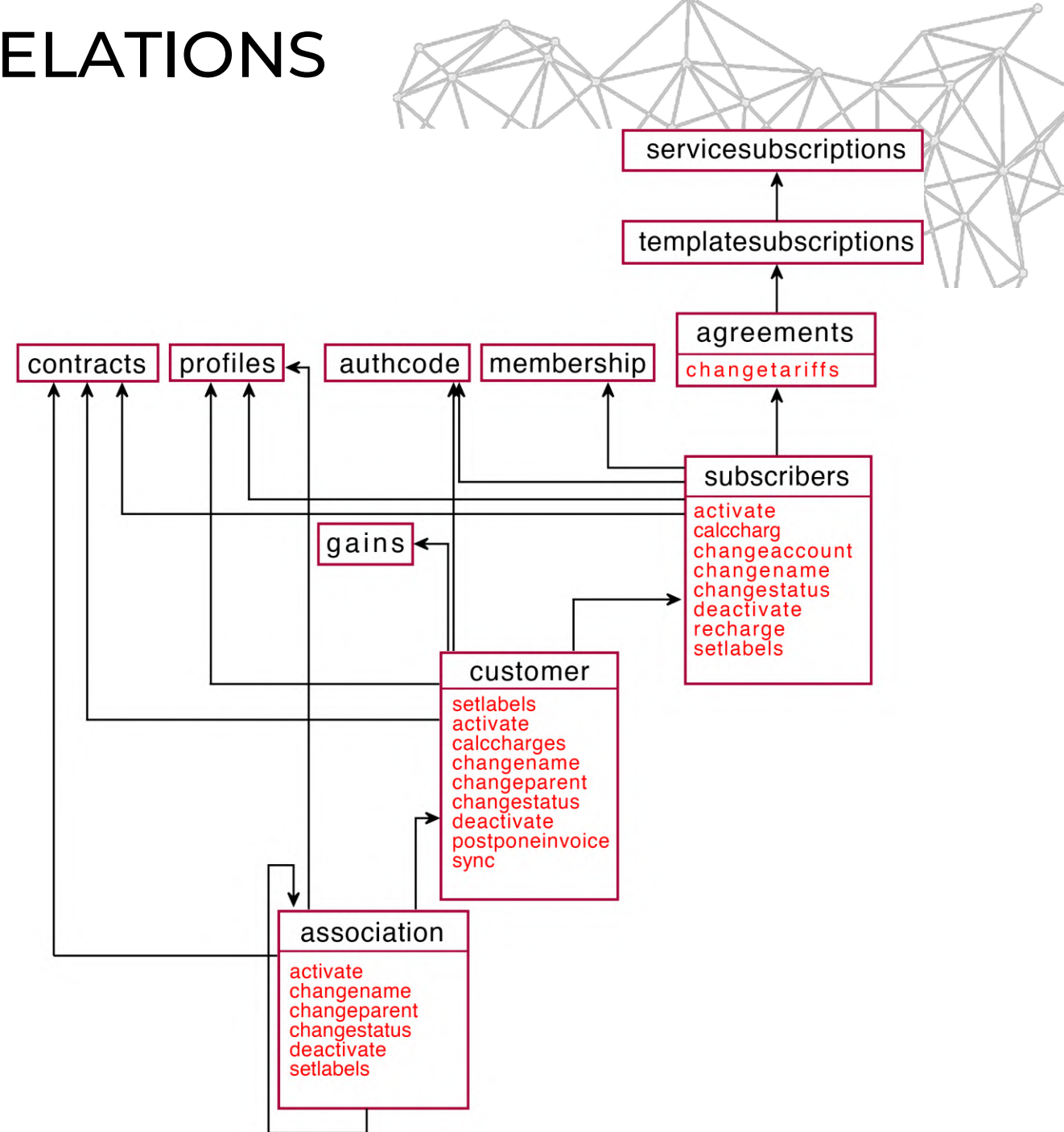
3 The business requirements and use cases are specific to each domain. They define functional requirements, use cases, business process flows, etc., related to specific Entities or Action.



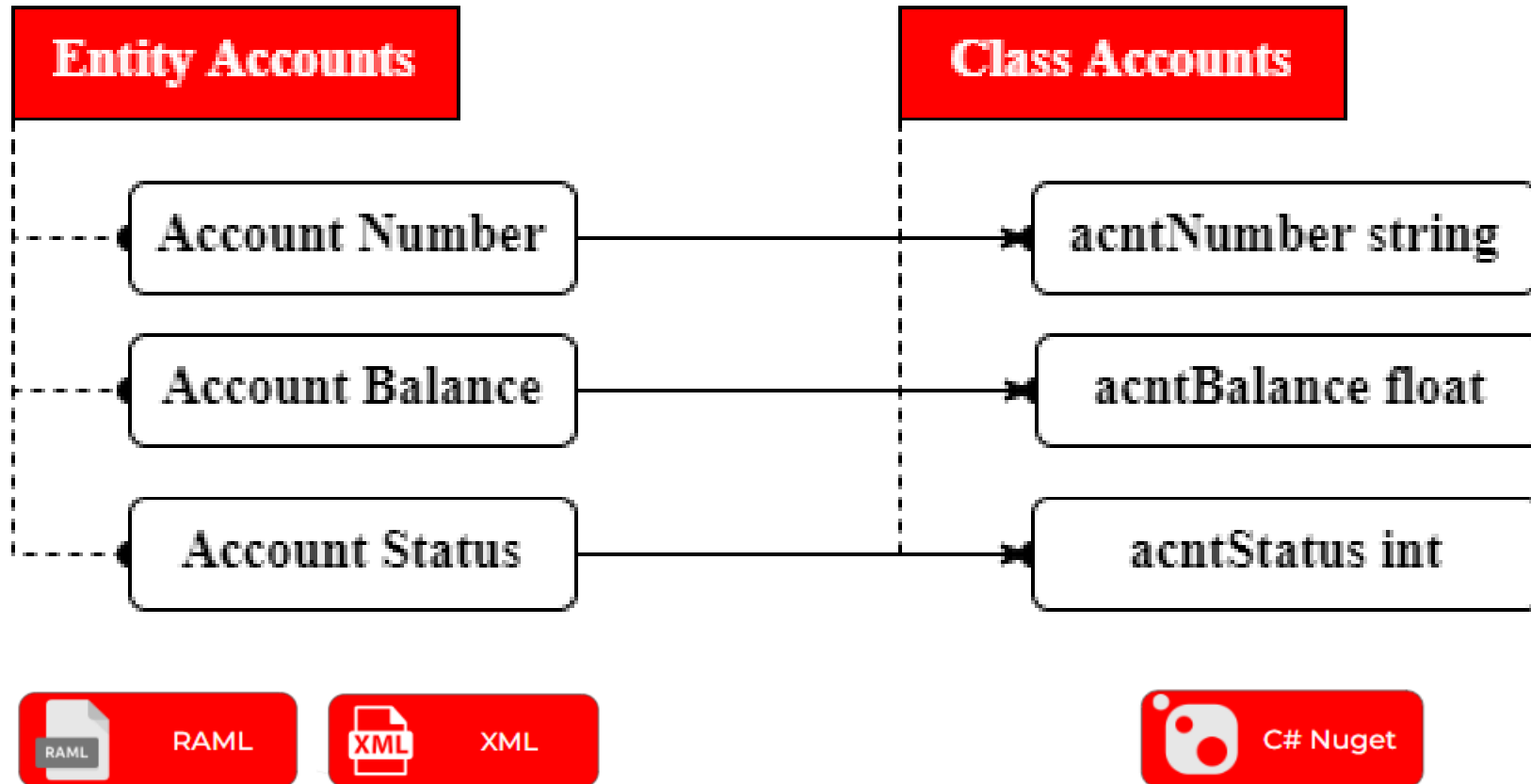
4 The platform maps the applicable Entities and Action models to relevant data schemas which are then exported & packaged into App Logic Functions along with related autogenerated documentation and developer guides.

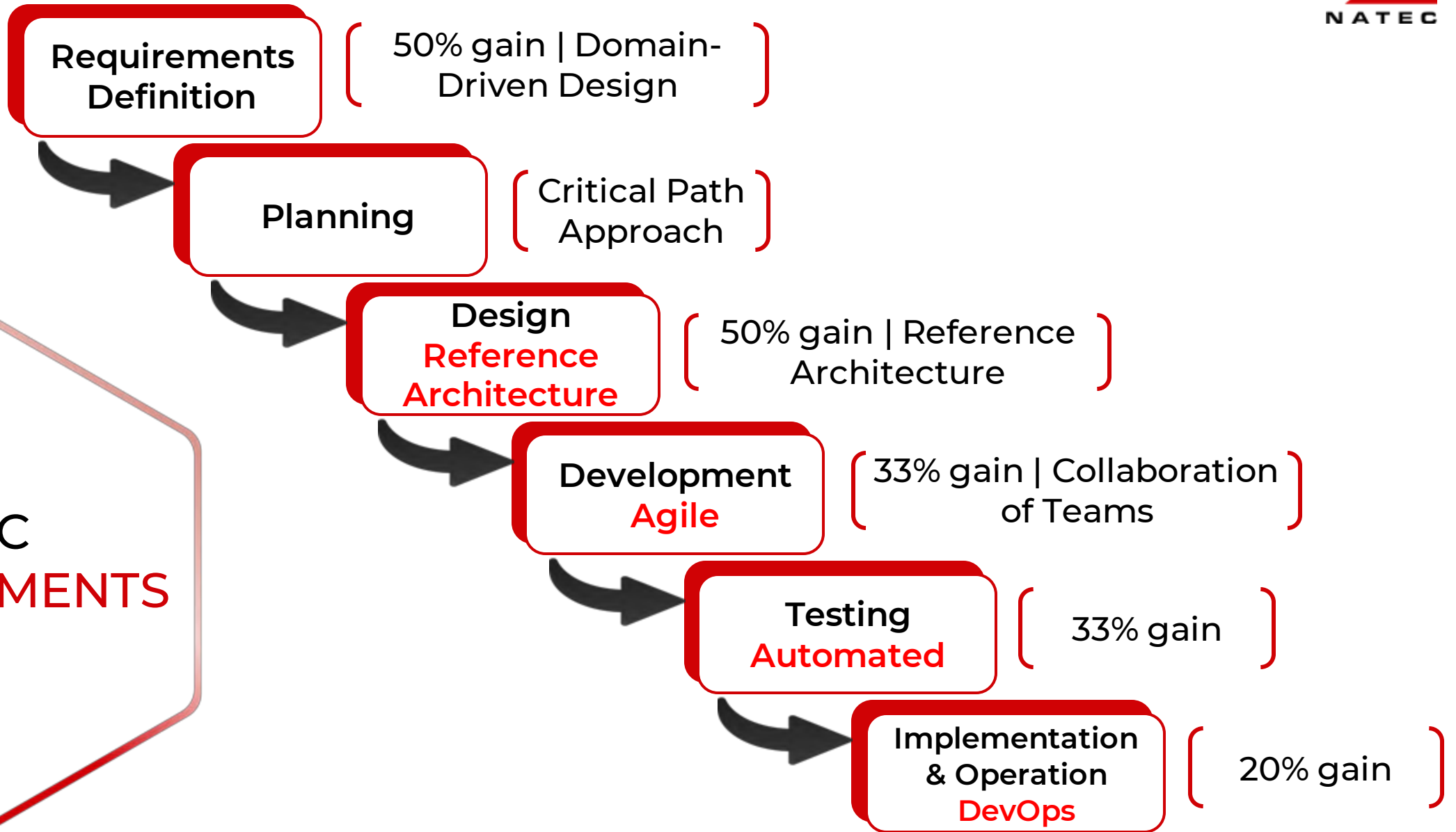
DOMAIN-DRIVEN DESIGN & RELATIONS

Domain products and services are defined as an input for source code generation to speed up the development process according to **Database-First** or **Model-First** approaches



DATABASE & MODEL-FIRST CODE GENERATION

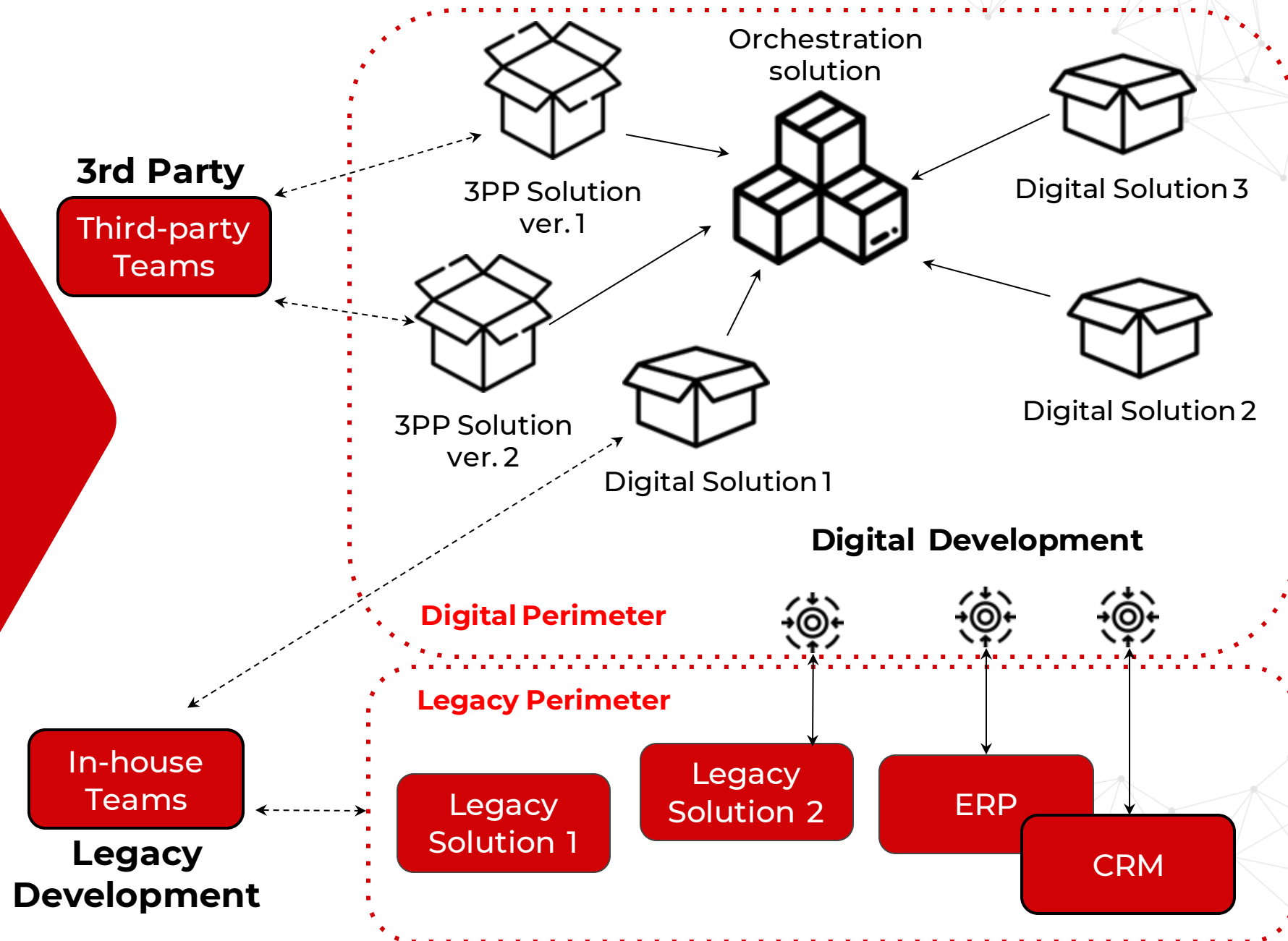




USE CASE: **LEGACY** TRANSITION



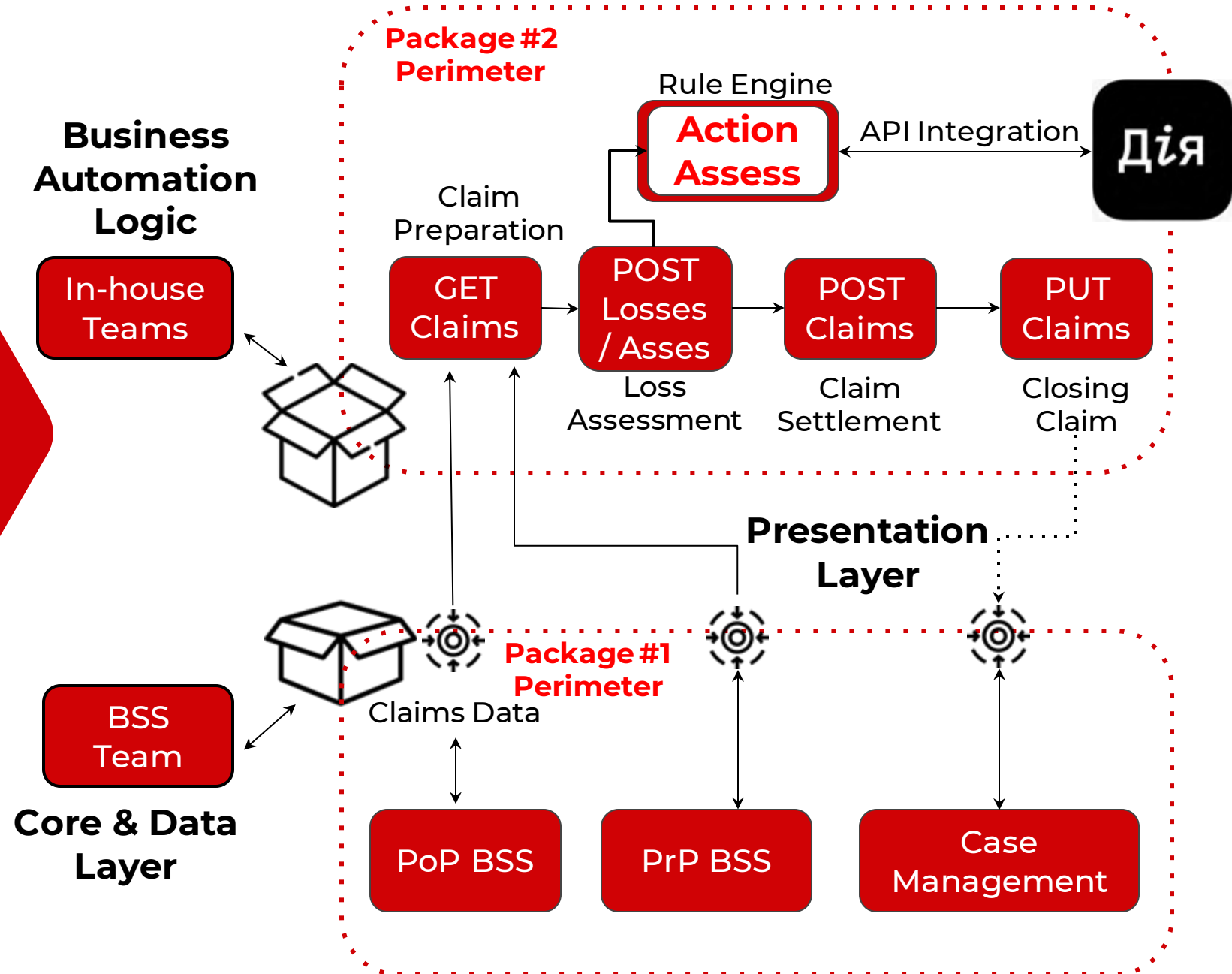
- ✓ A step-by-step smooth migration
- ✓ Old protocol proxy
- ✓ Re-use & combine legacy and digital services
- ✓ Develop-as-you-can approach for Legacy teams



USE CASE: BUSINESS AUTOMATION



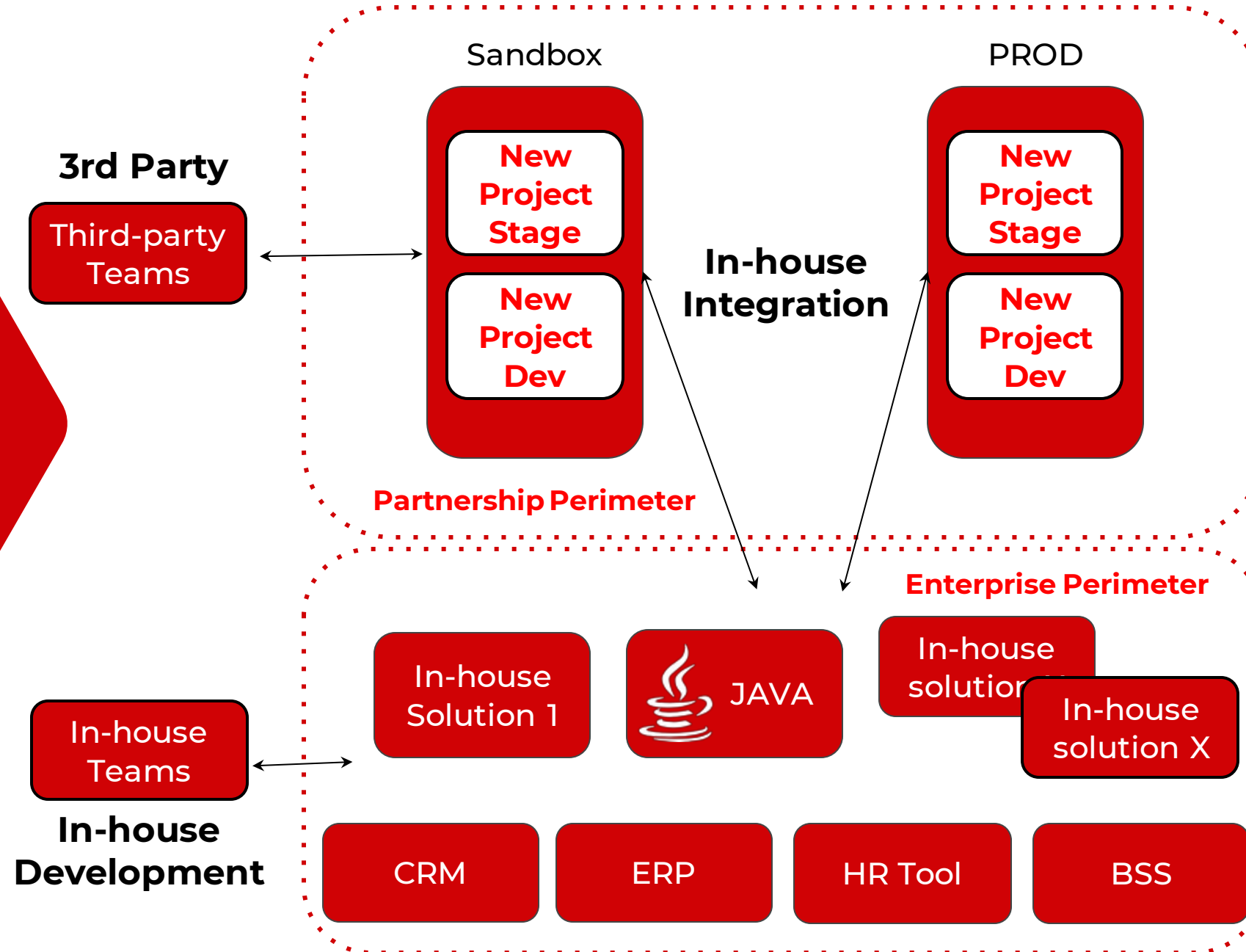
- ✓ Reusable packages for repeatable workflows
- ✓ Process-oriented packaging
- ✓ Low-code development within platform's perimeter
- ✓ Reference to re-use North / South API



USE CASE: **UNIFIED** DEVELOPMENT



- ✓ Quick access for 3PP (Low-entry threshold)
- ✓ Loosely-coupled & Transparent 3PP development
- ✓ Smooth 3PP deployment
- ✓ Security & Auth



Kyivstar, Ukraine

Reference Case

The leading mobile operator in Ukraine, Kyivstar, which is part of the VEON group of companies, has implemented an innovative collaborative development approach in one of its major projects to migrate tariffing and contract billing functions to new platforms from the outdated BIS system of Nexign company - in stages migrated wireline and Internet services, and then Home Internet (FTTB) and TV (Fixed Mobile Convergency) services to the new core of post-paid billing WideCoup BSS using the [MEF.DEV](#) serverless development platform.



VEON



CIO, Kyivstar
Andrey Zhukovskiy

"Our employees joined forces with the NATEC engineers and were able to implement a complex integration project in the shortest possible time, in which they combined a number of Legacy systems that ensure the operation of many services with a new service development platform - for this the systems are working successfully and showing excellent results."

Acknowledged by global leaders



NATEC is headquartered in Ukraine and is a provider of BSS software development solutions for communications service providers (CSPs). NATEC's primary offerings include the WideCoup BSS solution and the MEF.DEV platform, a framework that can be used to support incumbent and legacy BSS solutions through a number of API access points.

<https://www.analysismason.com/research/content/company-profiles/natec-digital-transformation-rma03-rma09/>



NATEC R&D has key competence in the implementation of BSS telecom solutions under the MEF.DEV® and WideCoup® brands. The emphasis on the development of boxed solutions favorably distinguishes NATEC among various outsourcing software development companies. Collaboration with mobile operator Kyivstar (VEON Group) to use NATEC billing solutions as an innovative postpaid BSS solution provides new opportunities for digital transformation in the telecommunications market.

<https://clutch.co/profile/natec-rd>



Become a member of the community



Serhii Polovnikov

Director of Engineering

On behalf of MEF.DEV, I am delighted to invite you to become a member of the Digital Transformation Community today. The MEF.DEV group is aimed at managers, IT engineers, and developers who are involved in Digital Transformation by designing software and tools that will facilitate interaction with customers both internally and externally.

The goal of the group is to suggest where to start with Digital Transformation projects, and how developers with technical knowledge gain the necessary management skills to successfully implement the project. Typically, digital transformation implies changes in development processes, so you can share your experience about how to best modernize the way software is being developed and deployed. This significantly increases the chances for successful digital transformation and puts the IT role at the project's forefront.

Here are some great perks you get when becoming a member:

- Find out members-only real-life experience in Digital transformation projects;
- Communicate with experienced members, share your knowledge, and get useful tips and hints.



<https://www.linkedin.com/groups/9050042>

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