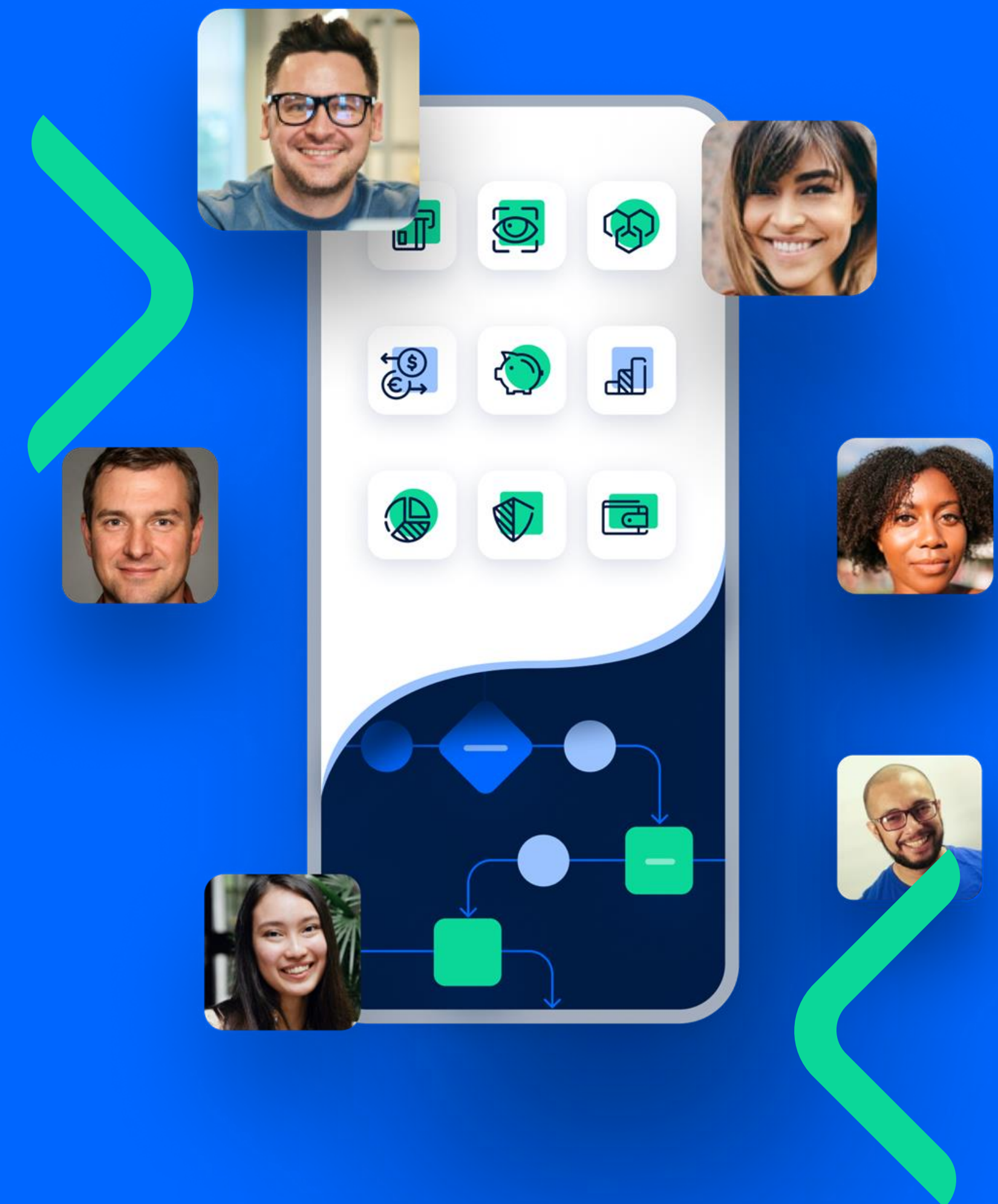# fintechOS northstar

Insurance Product Factory

Technical enablement session

Spring Release - R2 2022

Insurance Product Factory

Insurance Product Factory enables insurance companies to effectively manage and grow their insurance product portfolios from a single comprehensive digital solution.

The technical solution supports all the business processes, allowing users to benefit from innovative solutions

Digital Solution Overview
Digital assets included in the solution

Data Model
Highlight important entities

SDK
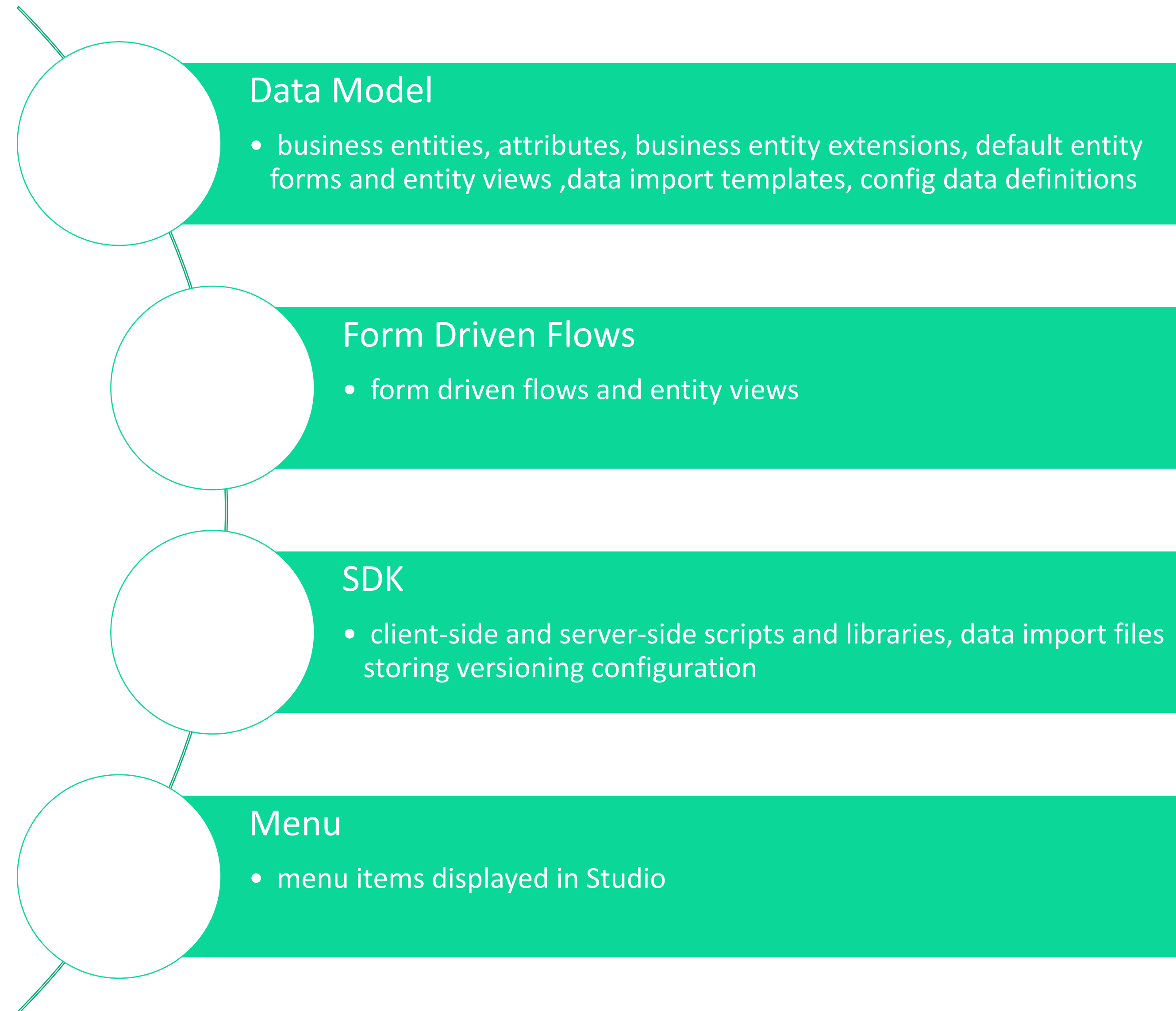Important coding aspects

APIs
How to consume the product

Digital solution overview

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Digital solution packages

IPF digital solution package

Insurance Product Factory digital solution package includes four digital assets.
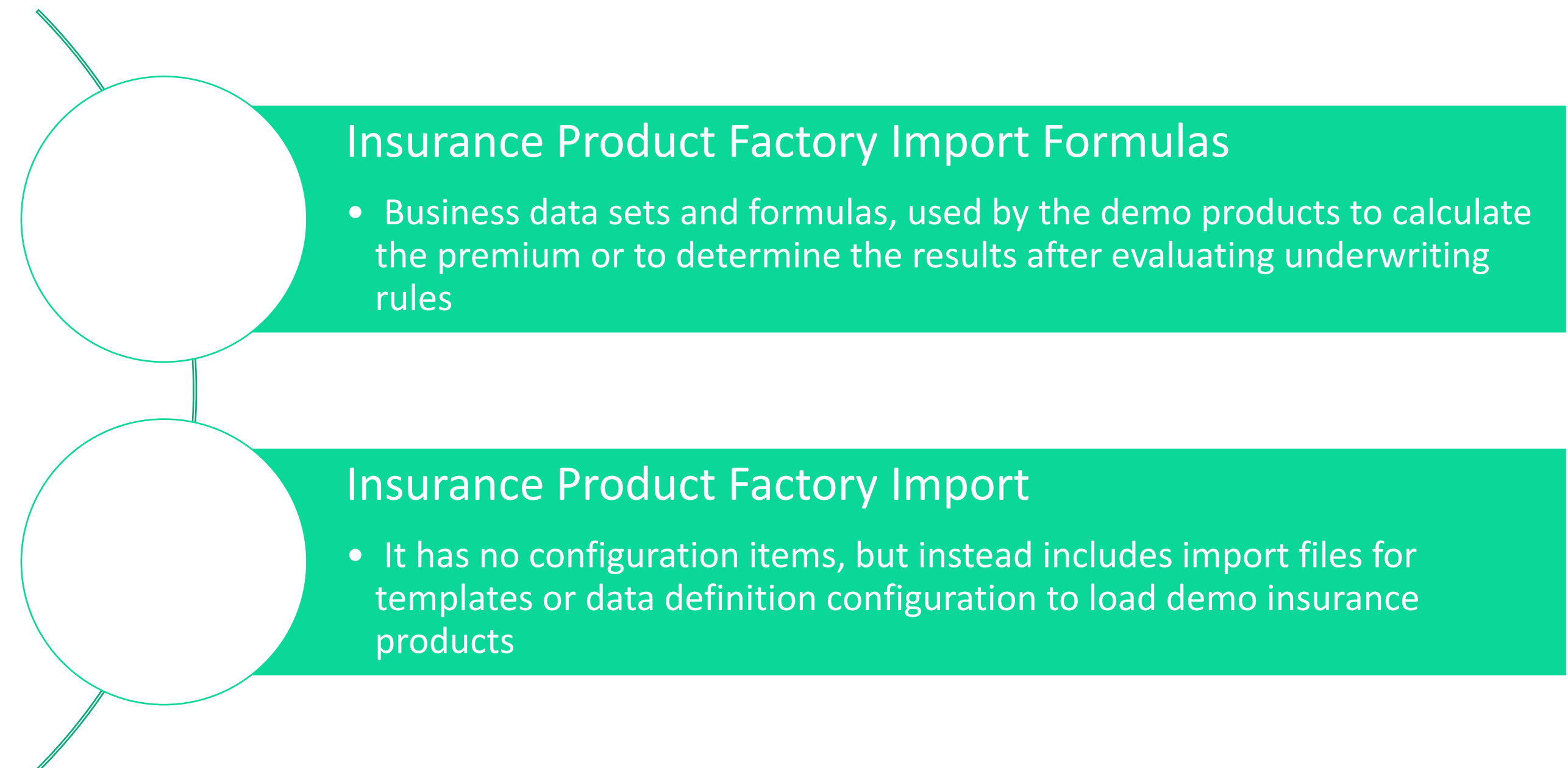
After installing it, you will be able to administer your insurance products, covering functionalities like: create a new product, create a new version of a product, clone an existing product, attach premium calculation or underwriting formulas, define lines of business.

Data Model

- business entities, attributes, business entity extensions, default entity forms and entity views ,data import templates, config data definitions

Form Driven Flows

- form driven flows and entity views

SDK

- client-side and server-side scripts and libraries, data import files storing versioning configuration

Menu

- menu items displayed in Studio

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Digital solution packages

IPF import formulas and IPF import digital solution packages

Insurance Product Factory Import Formulas and Import digital solution packages allow you to import fully configured demo insurance products. These solution packages are *optional,* and each of them includes one digital asset, with the same name and the solution package.

Insurance Product Factory Import Formulas

- Business data sets and formulas, used by the demo products to calculate the premium or to determine the results after evaluating underwriting rules

Insurance Product Factory Import

- It has no configuration items, but instead includes import files for templates or data definition configuration to load demo insurance products

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Data Model

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Lines of business

The configuration of lines of businesses is possible using the new entities that were included in the data model:

FTOS_IP_ClassOfBusiness,

FTOS_IP_CategoryOfBusiness,
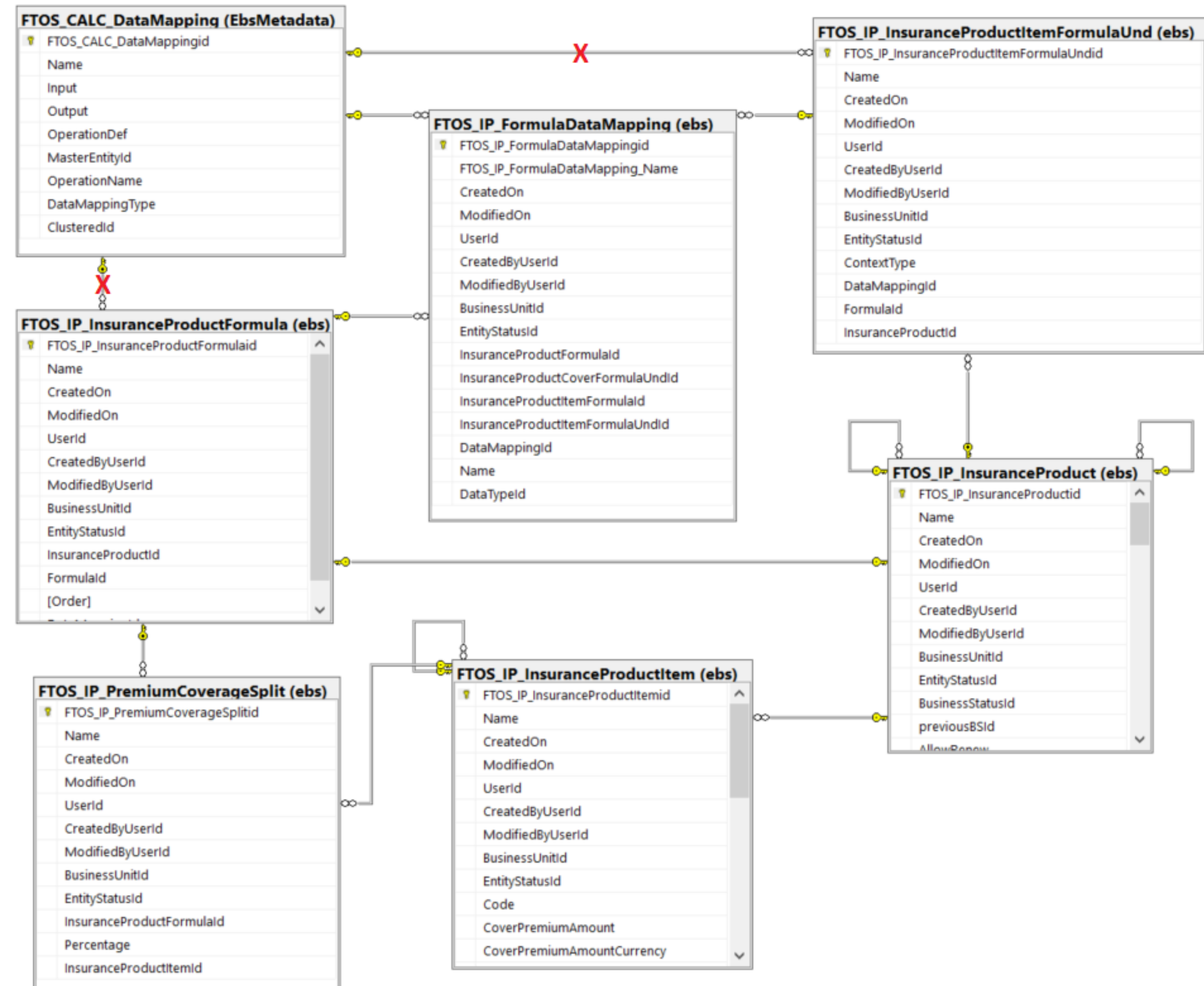
FTOS_IP_LineOfBusiness,

FTOS_IP_LineOfBusinessSubtype

Pricing & UW

Top down

- **Pricing** and underwriting formulas attached on **product** level

- Split the total premium amount of the product on coverages

- Add 2 different types of mappings for each type of formula, with possibility to extend to multiple mapping types in the future
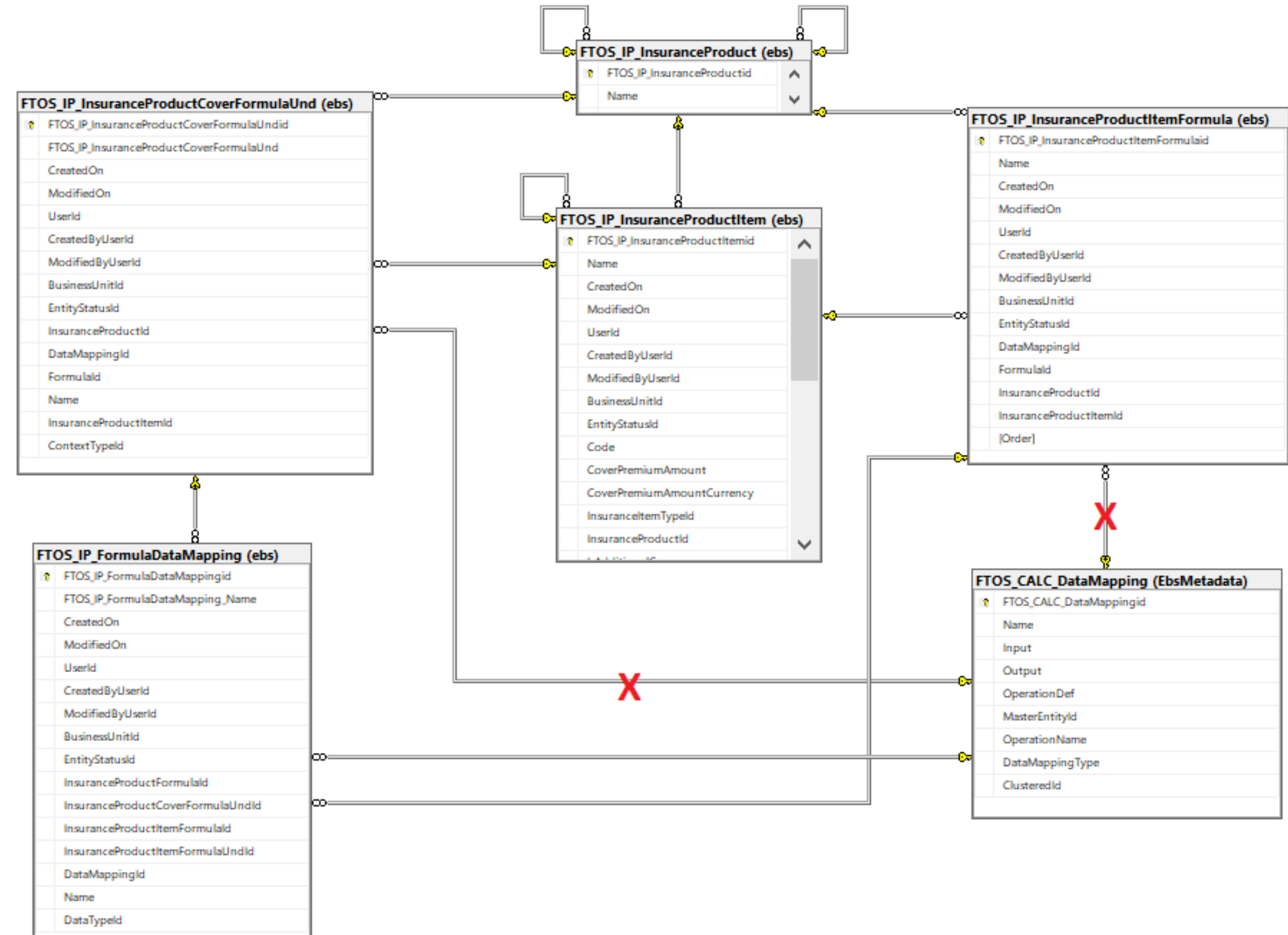
Pricing & UW

Bottom up

NEW

- Pricing and **underwriting** attached on **coverage** level

- Pricing aggregated at product level to get the total premium amount for the product

- Add 2 different types of mappings for each type of formula, with possibility to extend to multiple mapping types in the future

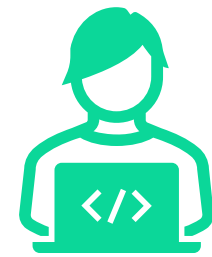# SDK

fintechOS
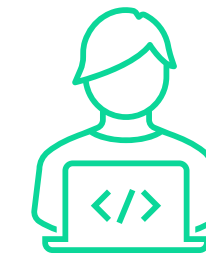
Product Factory SDK

Main changes

Refactoring endpoints exposed as APIs

Server-side validation on new entities part of the data model

Server-side scripts to improve the experience of first time import of the product, using excel files

Refactoring client side and server-side scripts

New client-side and server-side script **libraries** to support new features implemented

Use cases

- Improvements for a first time import of a product, using data import templates and excel files: server-side script FTOS_IP_InsuranceProductItem_BeforeCreate

- Server-side automation script library storing functions used by the APIs: FTOS_IP_InsuranceProductAPIs

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APIs

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Insurance product factory APIs

FTOS_IP_GetProductFormulasStructuresAPI

Use this API to get the keys expected by the formulas attached on coverages (product items) or on product.

The API will return information about all the formulas attached on the coverages of the products or formula attached on product level and all the structures for underwriting formulas attached on product level or on coverage level, for each context type.

For more details check Get Formula Structure confluence page

FTOS_IP_PremiumAmountAPI

Use this API to calculate the premium for each coverage (product item) and total premium amount of an insurance product. For each product item or product, the input keys expected by formula engine are required.

In order to get the premium calculation, the endpoint calls the formulas attached on each item included in the request and identified by its code or calls the formula attached on product level

For more details check Get Premium Amount page

FTOS_IP_GetUWRulesResultAPI

Use this API to run underwriting formulas attached on product level or on coverage level.

In order to use the API, the request needs to include all the keys expected by formula engine, for each context type.

For more details check Get UW Rules Results confluence page

NEW

Product Interrogations History

storing all the requests coming from different solutions or systems

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Got questions? Remarks? Feedback?

Talk to me 😊

Talk to Cristina Coseriu
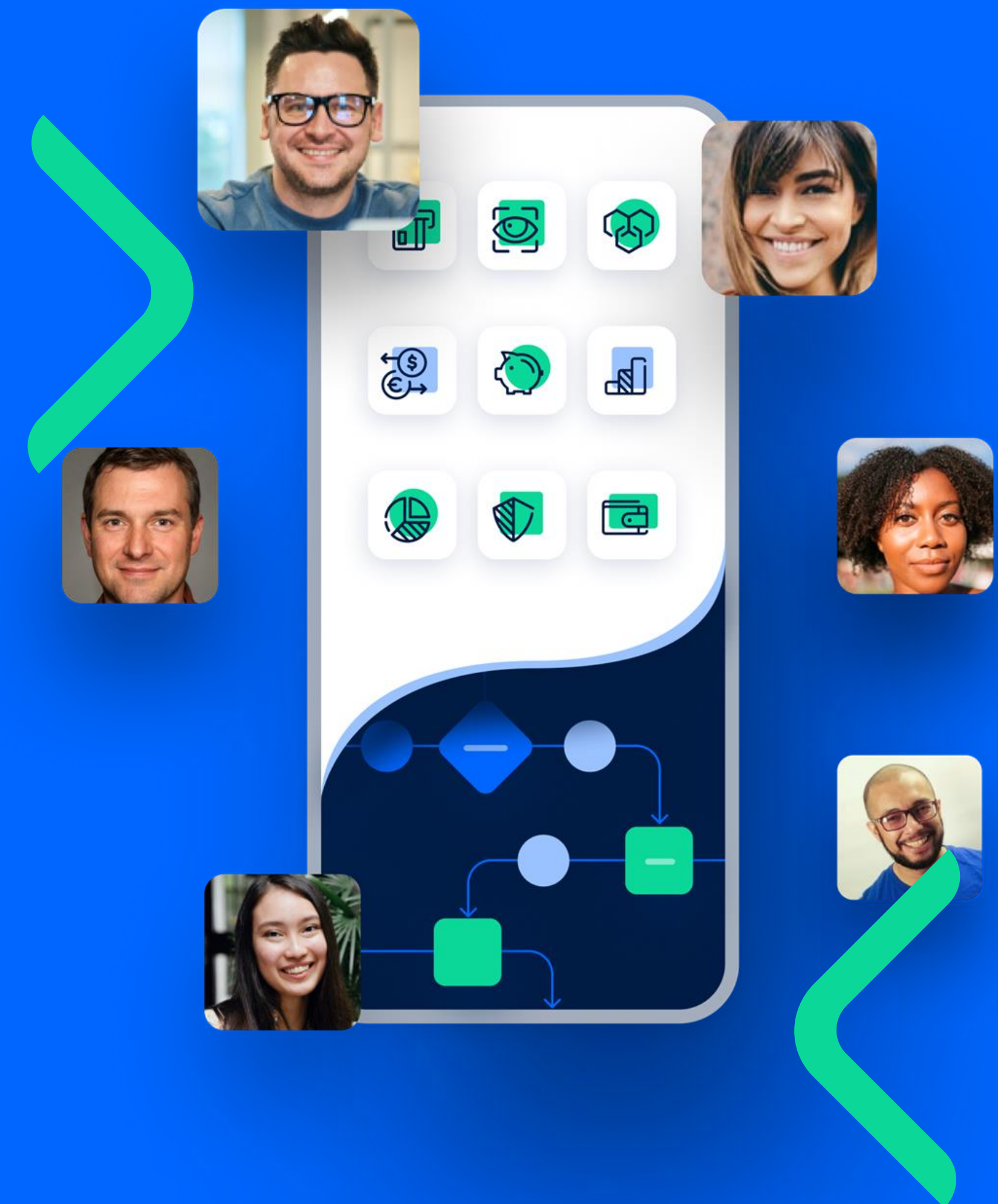
Cristina.coseriu@fintechos.com

(Or message me on teams)

Proposal Configurator

Technical enablement session

Spring Release - R2 2022

Proposal Configurator

The key capability of Proposal Configurator is the ability to configure product offerings in logical bundles

The technical solution supports all the business processes, allowing users to benefit from innovative solutions.

Digital Solution Overview

Digital assets included in the solution

Data Model

Highlight important entities

SDK

Important coding aspects

APIs

Interaction with proposal configurator

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northstar

Digital solution overview

Digital solution packages

Proposal Configurator

Proposal Configurator digital solution package contains a list of customization items defining the data model of the solution, together with data import templates to populate the entities. It includes elements part of the SDK of the solution as well.

Proposal Configurator Import

Proposal Configurator Import digital solution package contains a set of predefined configuration created on top of the household product.

Since the defined insurance personas are using audiences to evaluate quote property attribute values, installing Quote Property solution package prior to Proposal Configurator Import solution package is mandatory.

Data Model

Proposal Configurator

- New insurance persona type – formula engine

- Business workflow and versioning process on card level

- Working with 2 types of cards: single product vs multi product

- Defining card dimensions

- Map sum insured or excess on card item or card dimensions
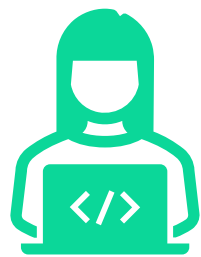
Proposal Configurator Solution Data Model documentation.
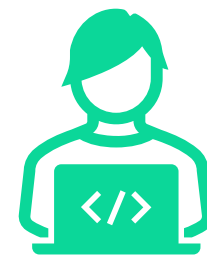
SDK

03

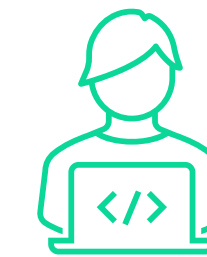fintechOS

Proposal Configurator SDK

Main changes

New client-side or server-side scripting

Improvements on existing libraries

Support for working with insurance personas evaluated based on formula engine

UI improvements

New proposal configurator API

Use case

- Card item/card dimensions

Key	Value	Key Type	Key Sub-type
🔍	🔍	(All) ▼	(All) ▼
usageType			
insuredAmount	500000	Sum Insured	
frequency			
coverage			
constructionYear			
buildingType			
resistanceStructure			

APIs

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Proposal Configurator API

FTOS_IP_ProposalConfigPremiumCalculation

This API was designed to allow the interaction with Proposal Configurator solution, returning details about the available cards and their premiums , based on the responses provided to the DNT questions.

The current versions of the API can be used in the quotation process, to get the premium amount for each card, using the latest settings created for a specific quote config.

For more details check Proposal Configurator page

In order to get fast responses using the API, all the quote config details are stored in a JSON object in the **configJSON** attribute from **FTOS_IP_QuoteConfig** entity. Every time a change occurs on the available configurations, this attribute is updated (for example when adding/removing a new insurance persona on card config, adding/removing card from insurance personas, approving new versions of the cards).

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Got questions? Remarks? Feedback?

Talk to me ☺

Talk to Cristina Coseriu

Cristina.coseriu@fintechos.com

(Or message me on teams)

Thank you!

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