

Opus Suite
Conference

STOCKHOLM

April 9, 2024

The journey of Opus Suite towards tomorrow's solutions

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by Systecon
**opus
suite**

 **Systecon**

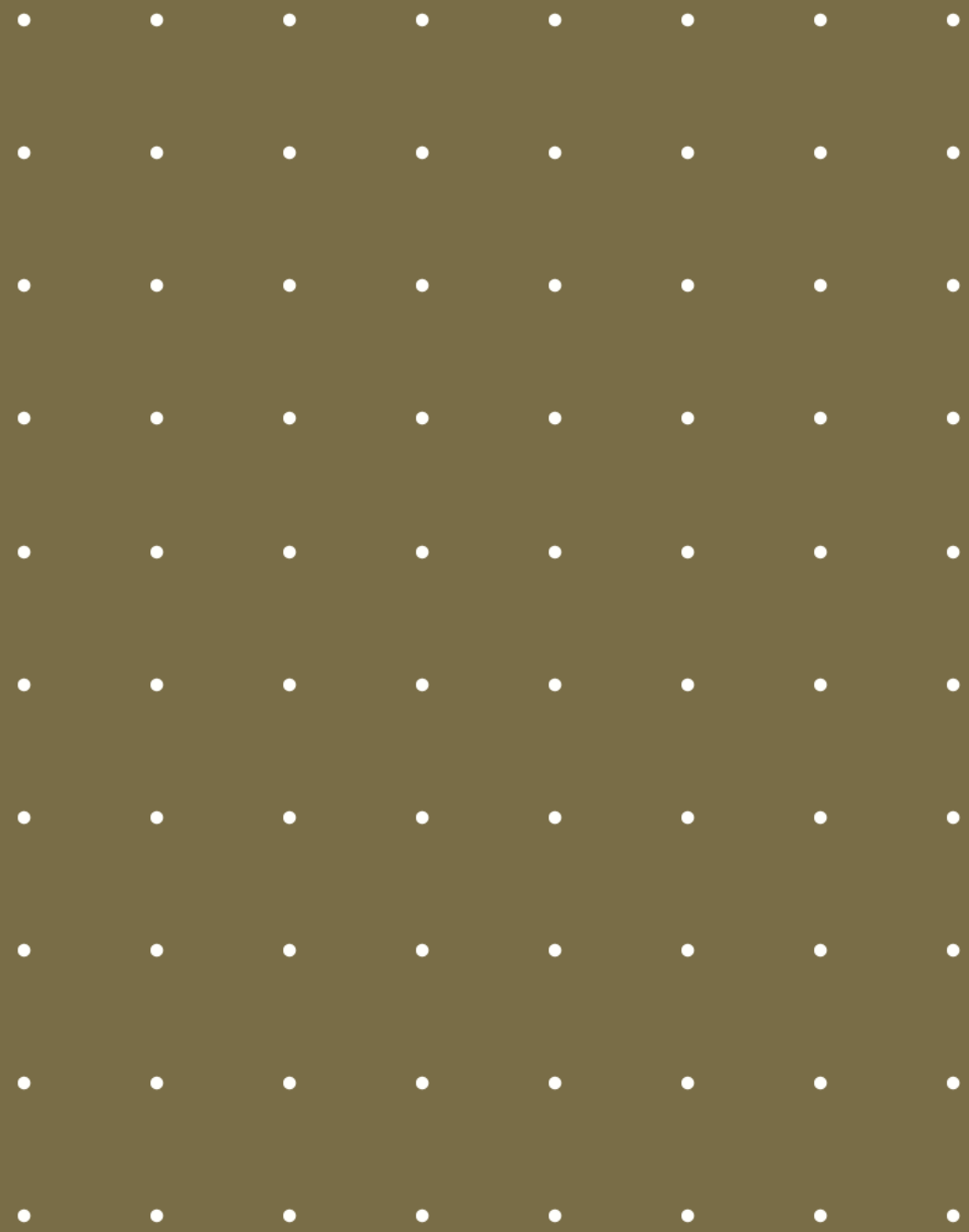
The Opus Suite journey

- 01 Opus Suite NEW**
The modern user experience
- 02 A better C/E-curve**
New and improved methods
- 03 The (artificially) intelligent suite**
AI in the LCM process

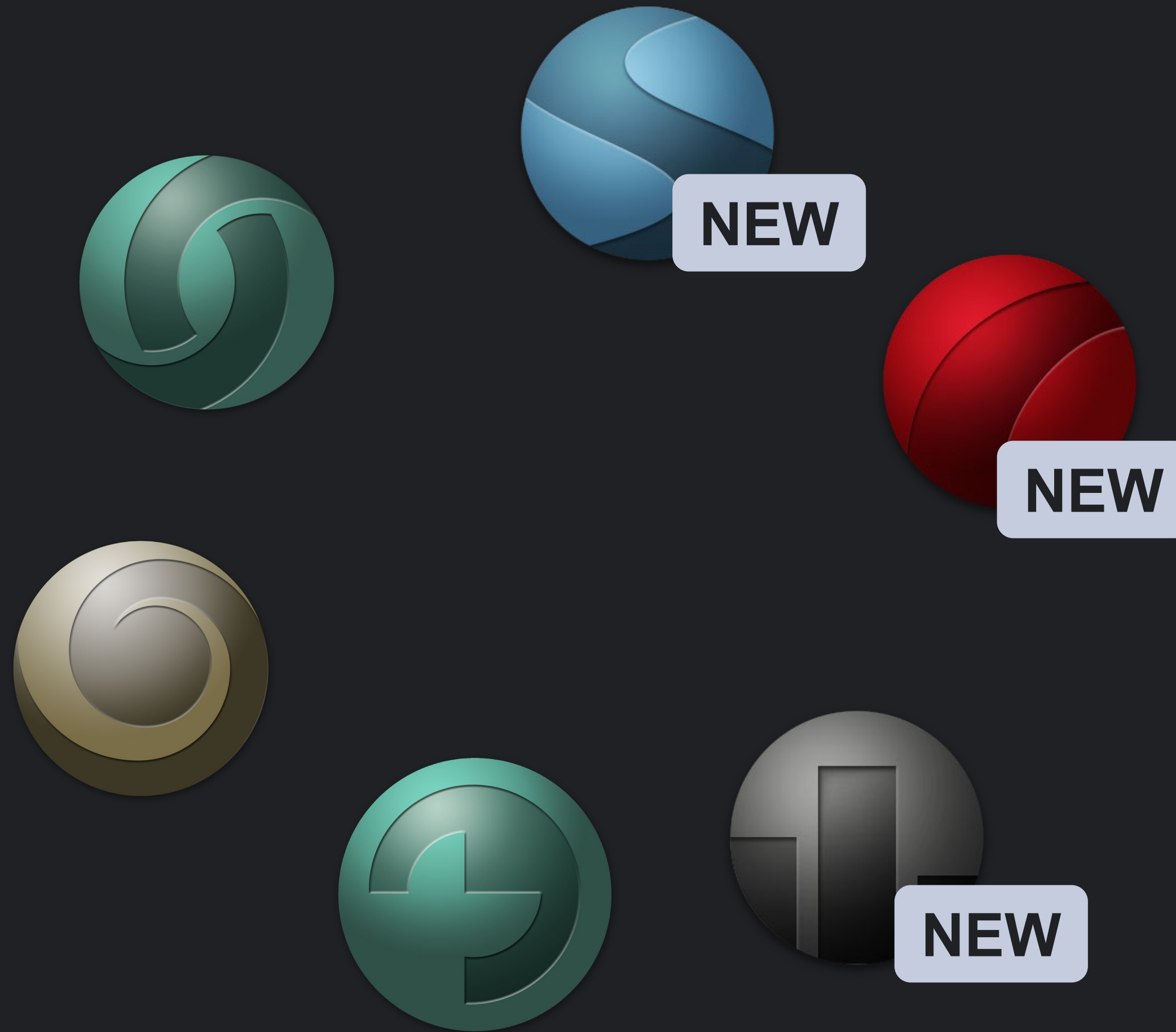
Opus Suite
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Opus Suite NEW



Opus Suite NEW



A modern suite with a larger scope

Traditional Opus Suite

Extract data

Transform data

Model representation

Forecast

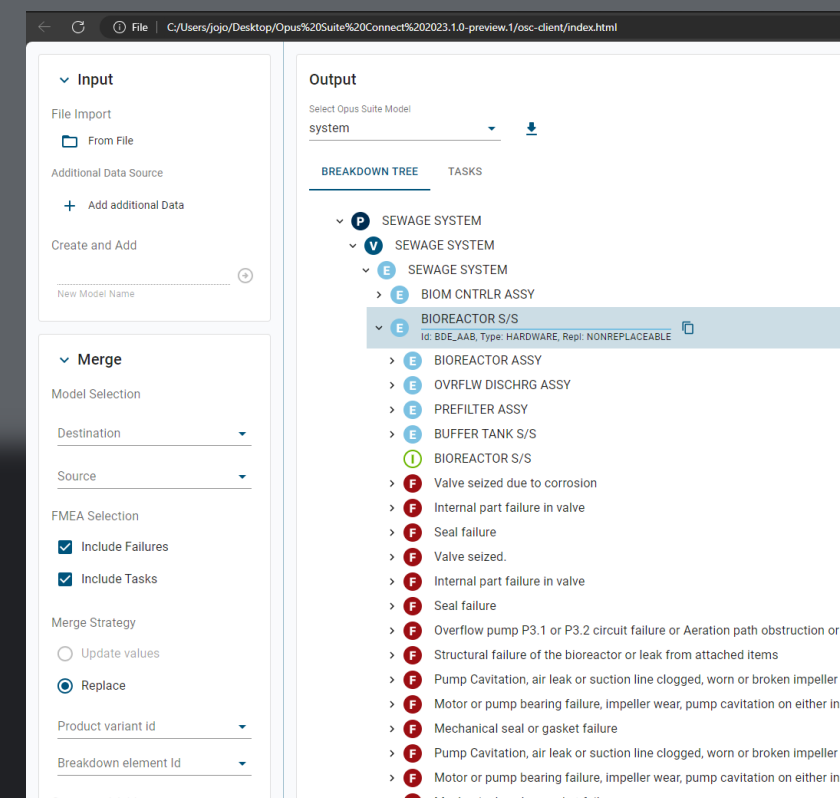
Enhance & Optimize

Insights & Analytics

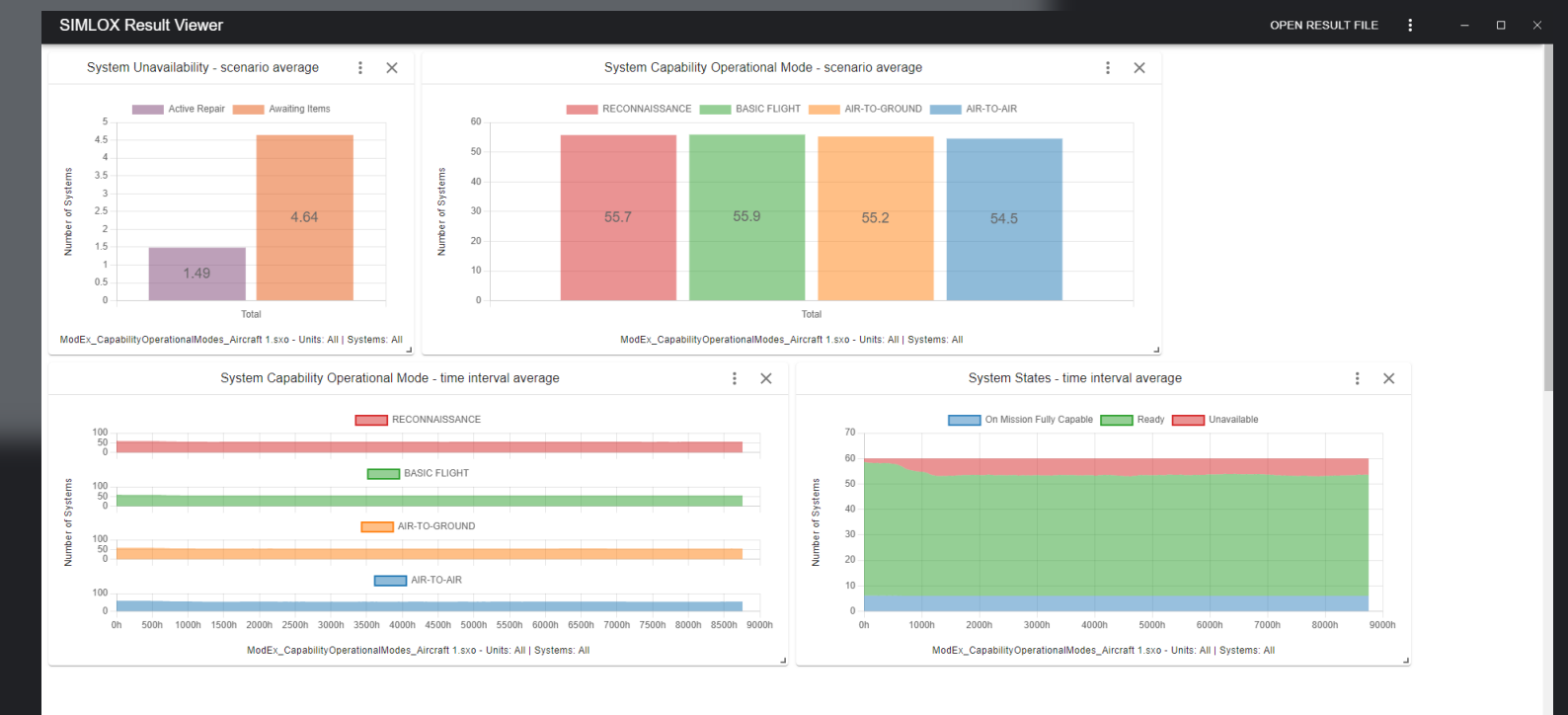
Modern Opus Suite

A modern suite with a larger scope

Traditional Opus Suite



Modern Opus Suite



A modern user experience

Opus Suite Connect 2024.0.2

Model overview F4U

Product

- F4U_FAMILY
- Fighter 4U
 - Engine System
 - 51_ENG_1 / Engine
 - Fan
 - Compressor
 - Turbine (2)
 - 515
 - 51_ENG_6 / 516
 - 51_ENG_7 / 517
 - 51_ENG_8 / Bearing
 - 51_ENG_9 / 519
 - 51_ENG_10 / 5110
 - 51_ENG_11 / Oil Pump
 - 51_ENG_12 / 5112
 - 51_ENG_13 / Electronic unit
 - 51_ENG_14 / 5114
 - 51_ENG_15 / 5115
 - 51_ENG_16 / 5116
 - 51_ENG_17 / Fuel pump
 - 51_ENG_18 / 5118
 - 51_ENG_19 / 5119
 - 51_ENG_20 / 5120
 - Landing Gear System
 - Flight Control System
 - Environmental Control System
 - Fuel System
 - Communication System

Maintenance organization

OPUS10 Result Viewer

F4U DASHBOARD | SHIP DASHBOARD | NEW DASHBOARD | NEW DASHBOARD (1)

Result files: All

Point chart

Point data

System availability

Scenario	Value
F4U_optimal.oprv	0.947
F4U_SupplierSuggestion_repl.oprv	0.938
F4U_international.oprv	0.892

Expected number of backorders

Scenario	Value
F4U_optimal.oprv	0.95
F4U_SupplierSuggestion_repl.oprv	0.923
F4U_international.oprv	2.846

Life support cost

Scenario	Value
F4U_optimal.oprv	717,365,456
F4U_SupplierSuggestion_repl.oprv	717,681,152
F4U_international.oprv	716,275,392
F4U_optimal.oprv	715,800,832

Item result table

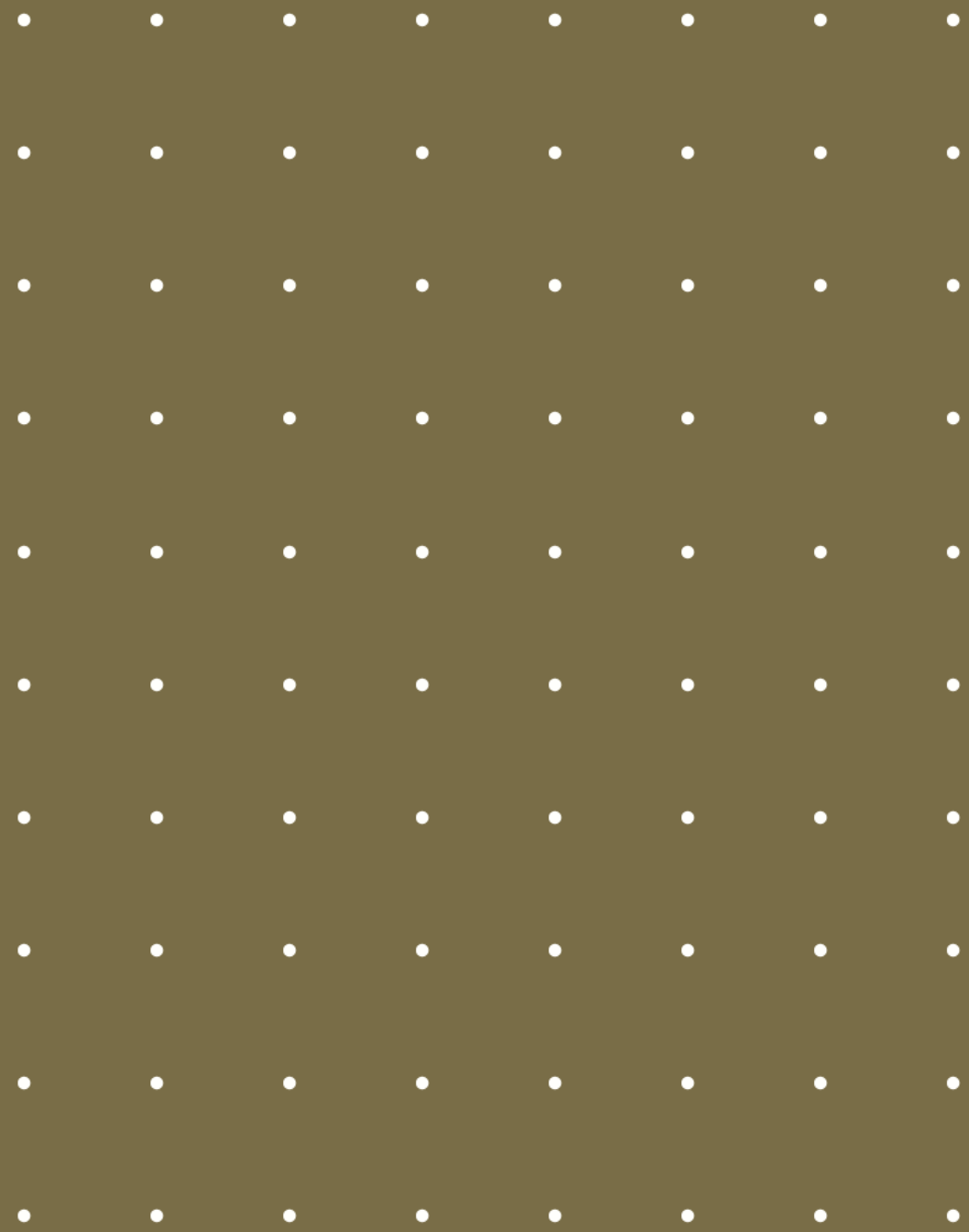
Item	Station	ROSIZ			STSIZ		
		F4U_Internati...	F4U_SupplierSuggestion_repl.oprv	F4U_optimal...	F4U_Internati...	F4U_SupplierSuggestion_repl.oprv	F4U_optimal...
331	INTL	0	-	-	0	-	-
331	MAINDEP...	0	0	0	0	1	1
331	SQ1_W1	0	0	0	0	0	0
331	SQ1_W2	0	0	0	0	0	0
331	SQ2_W1	0	0	0	0	0	0
331	W1	0	0	0	0	0	0
331	W2	0	0	0	0	0	0
331	WORKSH...	0	0	0	0	0	0
3310	INTL	0	-	-	1	-	-
3310	MAINDEP...	0	0	0	2	1	1
3310	SQ1_W1	0	0	0	0	0	0

CDI

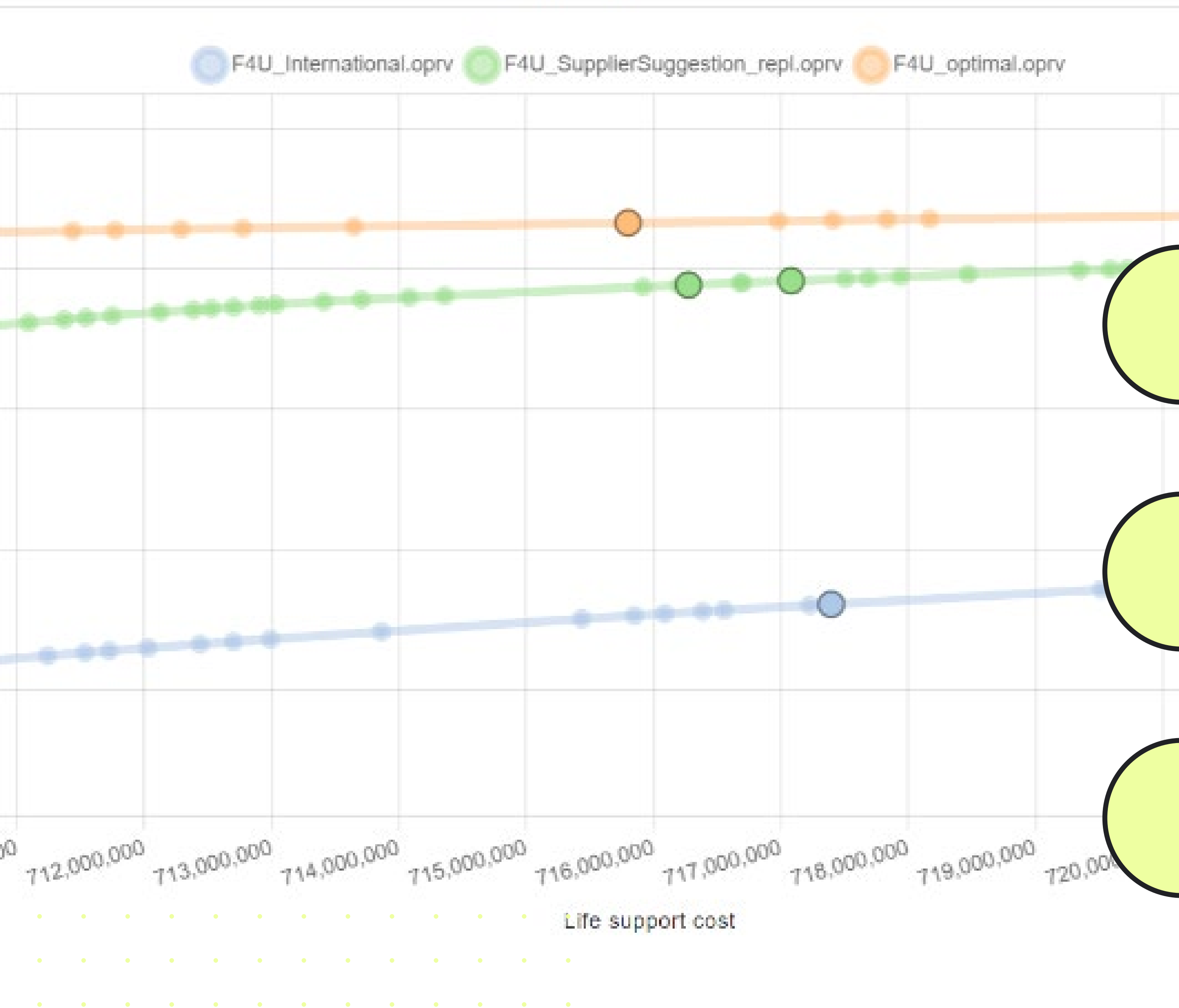
F4U_International.oprv	F4U_SupplierSuggestion_repl.oprv	F4U_optimal.oprv
44	90	93
75,262,871.33	105,522,780.09	105,909,295.97
		105,272,308.21

Rows per page: 100 | 1-100 of 1037

A better C/E curve



Point chart



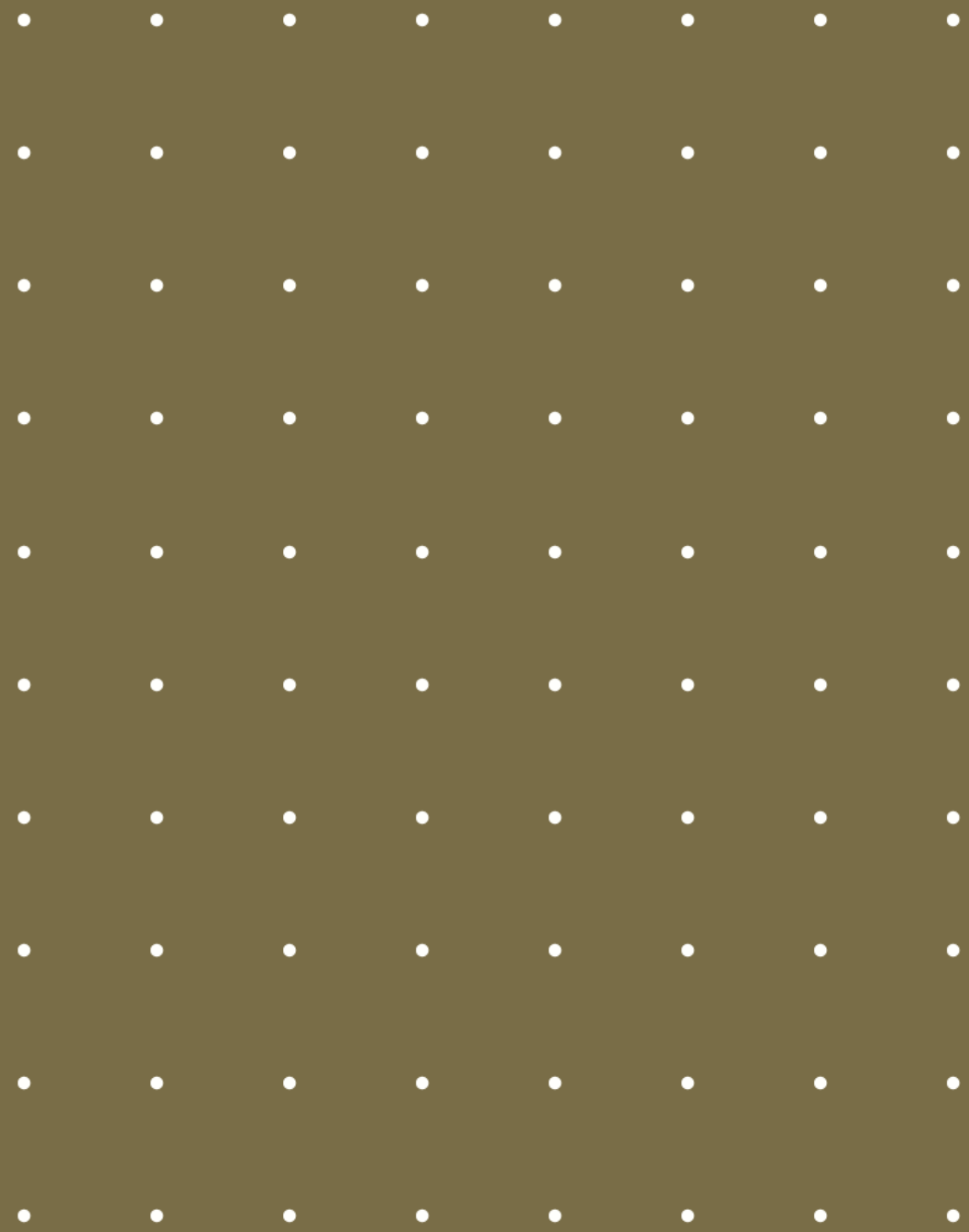
New and improved methods

New and improved algorithms

Target the real business objectives - MoEs

A wider set of problems to solve

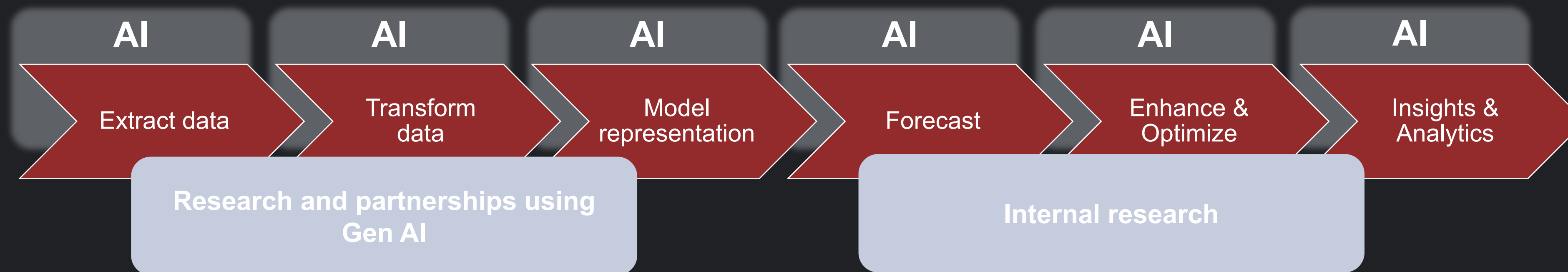
The (artificially) intelligent suite



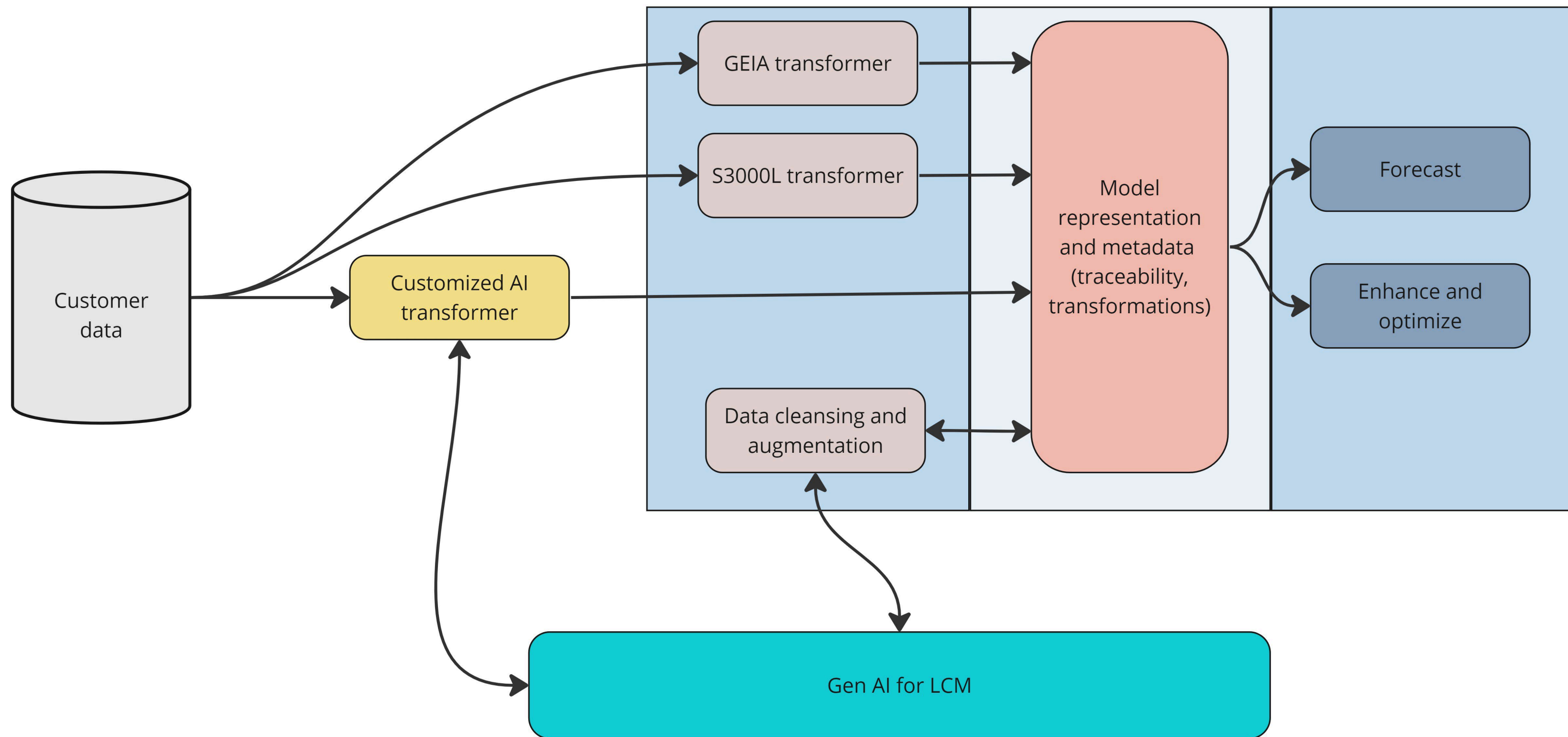
A recap of the journey so far

- Based in mathematical solutions
- Monte Carlo simulation
 - Use randomness to solve deterministic problem
- Increased use of heuristics in optimization
 - LORA
 - Extensions
 - Solution finder
 - OPUS EVO
- The future - Machine learning and Gen AI

Possible use of AI in Opus Suite



Data processing in Opus Suite using Gen AI



Thank you.

