

NEMO Release Letter

Version 2022-11-11



Content

Summary.....	1
Signature Features.....	2
Natural Performance Index (NPI).....	2
Natural Leverage Index (NLI).....	2
Unsupervised Learning.....	2
Meta-data Driven.....	3
Hyper-Dashboard.....	3
Process Mining.....	4
All Details.....	5
New and Changed Features.....	7
Metrics (NEW and IMPROVED).....	7
Reports (NEW and IMPROVED).....	8
Focus (NEW).....	9
Compatibility.....	10
Functional Limitations.....	10
Component Status.....	10
Known Issues.....	10
Documentation.....	10
Availability.....	10

Summary

As of November 11, 2022, proALPHA has released NEMO version 2022-11-11.

NEMO – standing for Natural Enterprise Management Optimizer – is a new breed of AaaS – Analytics-as-a-Service – offering from proALPHA. NEMO analyzes all sorts of event data. In particular NEMO analyzes business processes as performed with proALPHA ERP. The objective of NEMO is to enable better daily decisions by relating operational activities (input factors) with financial results (output factors).

NEMO 2022-11-11 is a pure metadata release. There is no new software this time. Because on the one hand we are working feverishly on a significant performance boost and on the other hand there is growing customer demand around “too large” inventories.

In particular, we delivered a refined metric and a refined report “Part Consumption” and an overhauled algorithm for “DIO”. In conjunction predicting which part needs to be ordered when shall become easier.

Furthermore, Focus now allows analyzing Defined Columns in a new Infoscope.

Signature Features

Natural Performance Index (NPI)

The NPI measures and ranks the fitness of a business. High NPIs indicate a significant improvement potential which is likely to be achieved. They help the user find and decide between the available optimization opportunities and are key to the daily decision support provided by NEMO.

Natural Leverage Index (NLI)

The NLI measures and ranks the degree of efficiency (“Wirkungsgrad”) of a certain operational measure. High NLIs indicate a significant leverage which is likely to be achieved. They help the user find and decide between the available opportunities and as such facilitate the daily decision support provided by NEMO.

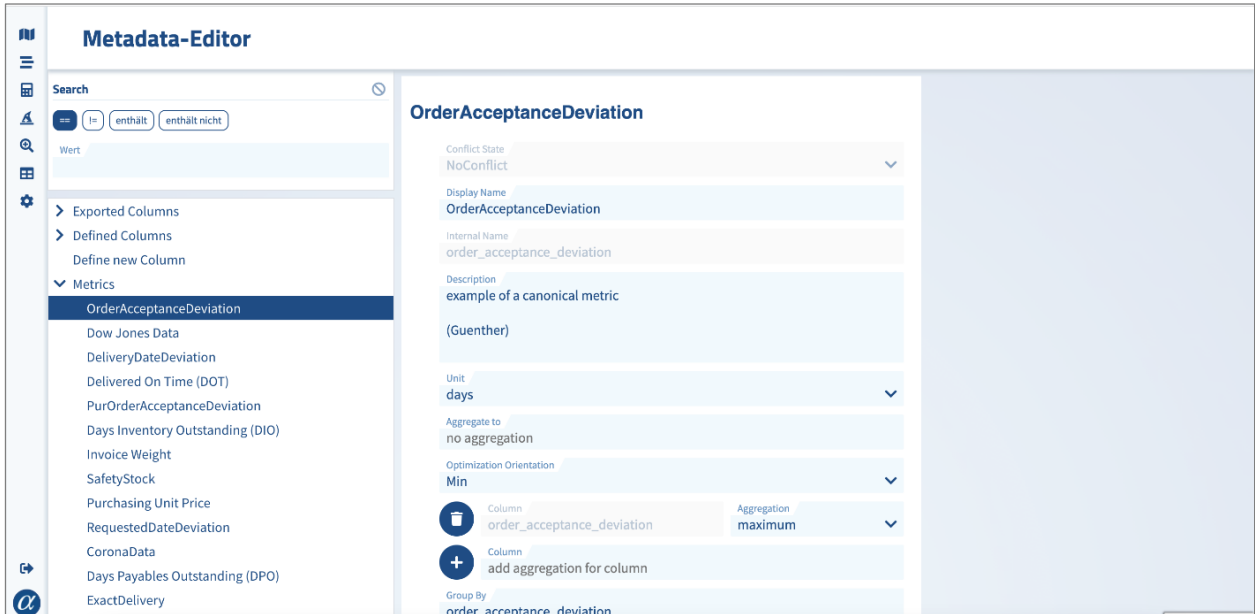
Unsupervised Learning

Since there is no optimum for business process optimization typical machine learning approaches don't apply. Hence NEMO leverages robust advanced statistics out of the so-called space of unsupervised learning algorithms.



Meta-data Driven

NEMO is not only data- but also metadata-driven. This means that virtually all metrics and scopes can be formed – either manually or automatically.



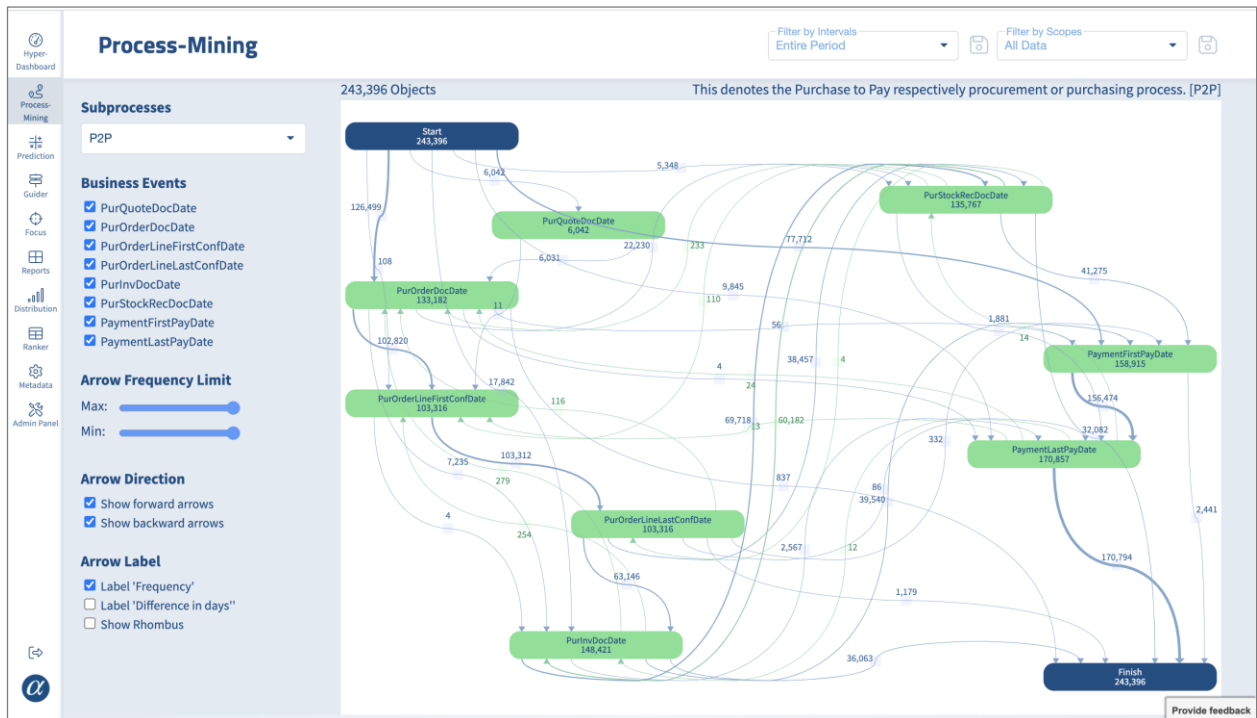
Hyper-Dashboard

NEMO continuously ranks all business process correlations. This enables dynamic dashboards which are complementing classical dashboards.



Process Mining

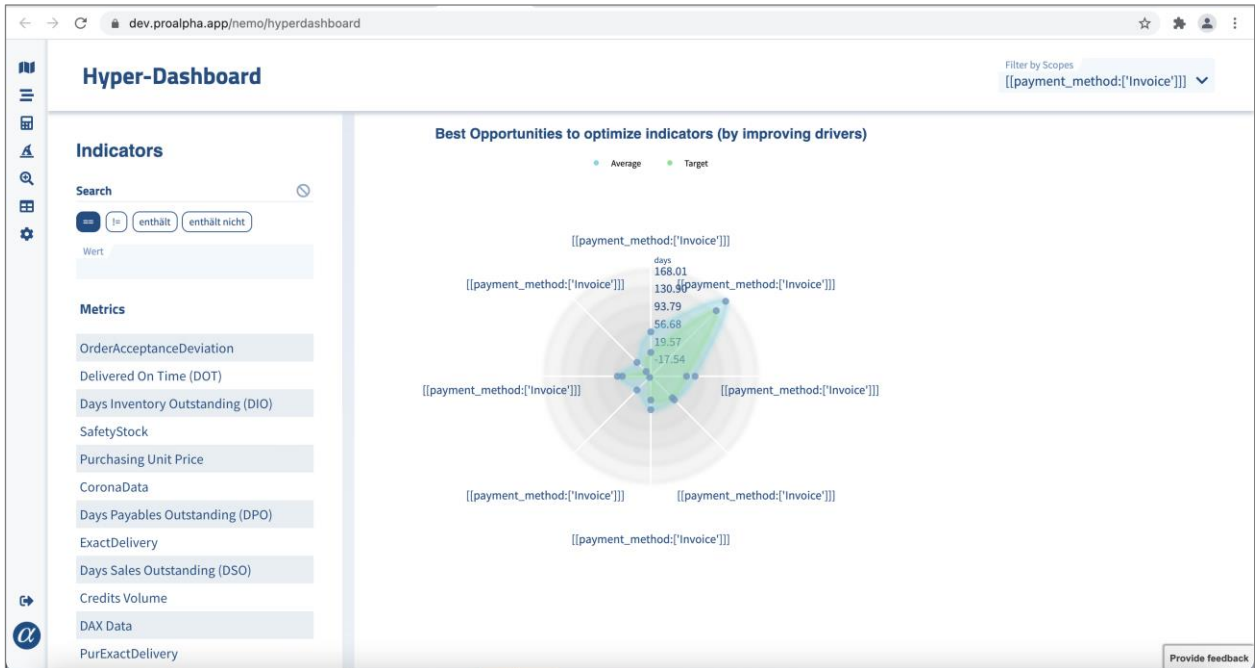
Inherently NEMO discovers all executed business processes. Process Mining visualizes these as so-called process maps. The edges (lines, links) represent business process variants. They can be captured in scopes for further analysis (e.g., Focus and Guider). The nodes (vertices, points) represent the business events which, chained up, represent the executed business activities.



All Details

NEMO works always on details. There is no need to do any pre-aggregations at all. This means that the user can drill down to the detailed business documents at any point in time and instantaneously.

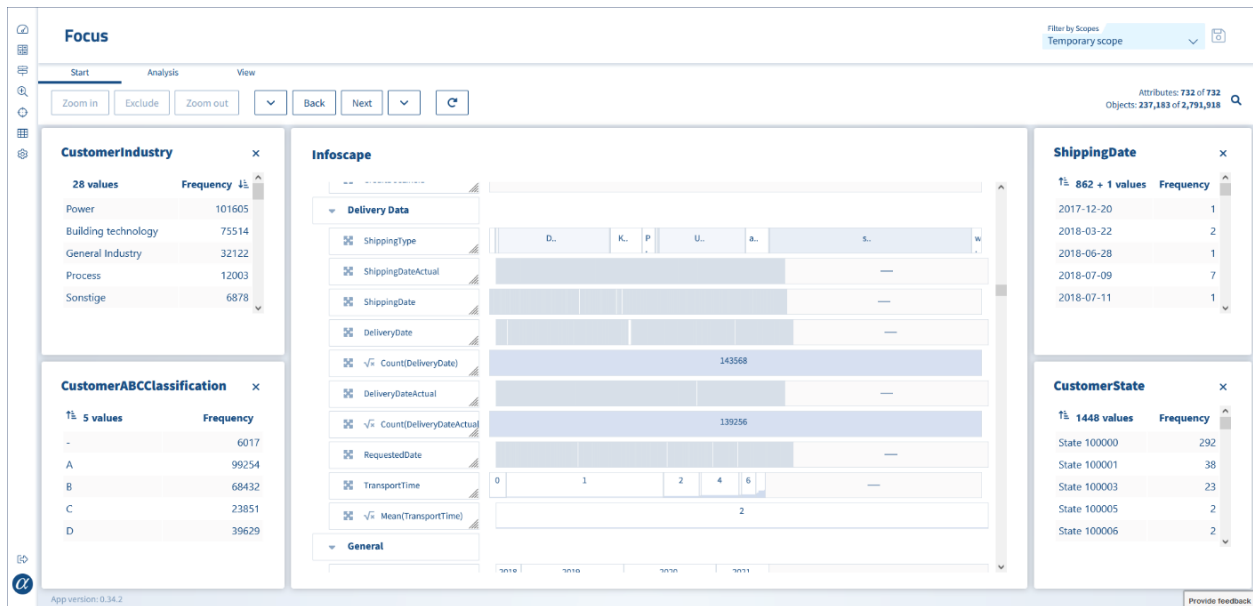
Here an example for the Payment Method Invoice. The Hyper-Dashboard provides an overview of the top measures for process improvements.



The Ranker table gives the details behind the Hyper-Dashboard.

NPI	NLI	Driver	Indicator	R Squared	Correlation	Actuals	Gain	Scope
601,917,952	40,704.1	Delivered On...	Days Invento...	0.05	0.23	€14,787.66k	€11,839,552...	PaymentMet...
567,153,024	38,353.1	PurExactDeli...	Days Invento...	0.06	0.25	€14,787.66k	€8,897,089.5...	PaymentMet...
558,322,112	40,228.5	PurExactDeli...	Days Invento...	0.07	0.26	€13,878.75k	€8,437,466.6...	[[invoicing_d...
551,381,504	1,133,087.3	RepLeadTi...	Days Invento...	0.24	0.49	€486.62k	€2,317,477.3...	[[customer_r...
541,763,584	39,035.5	Delivered On...	Days Invento...	0.05	0.22	€13,878.75k	€11,146,345...	[[invoicing_d...
368,957,248	13,932.0	Replenishme...	Days Invento...	0.53	0.73	€26,482.77k	€892,769.54k	[[part_type:[9]]
249,010,336	16,839.1	RepLeadTi...	Days Invento...	0.02	-0.14	€14,787.66k	€13,503,370...	PaymentMet...
248,111,296	25,661.8	RepLeadTi...	Days Invento...	0.04	-0.19	€9,668.50k	€6,729,405.4...	[[customer_i...
205,359,856	14,796.7	RepLeadTi...	Days Invento...	0.02	-0.13	€13,878.75k	€11,834,033...	[[invoicing_d...
176,447,920	32,377.2	PurExactDeli...	Days Invento...	0.09	0.30	€5,449.76k	€1,909,336.5...	[[customer_a...
174,167,904	23,651.6	RepLeadTi...	Days Invento...	0.03	-0.16	€7,363.89k	€6,652,653.0...	[[customer_a...
172,000,192	3,384.2	Delivered On...	Days Invento...	0.05	0.23	€50,825.06k	€3,189,364.7...	[[part_a_b_c...
171,797,920	3,349.2	Delivered On...	Days Invento...	0.05	0.23	€51,294.62k	€3,269,720.8...	[[invoice_doc...
171,730,720	3,349.2	Delivered On...	Days Invento...	0.05	0.23	€51,274.56k	€3,268,441.8...	[[supplier_a...
160,876,304	3,136.3	PurExactDeli...	Days Invento...	0.07	0.26	€51,294.62k	€2,386,454.0...	[[invoice_doc...
160,813,376	3,136.3	PurExactDeli...	Days Invento...	0.07	0.26	€51,274.56k	€2,385,520.6...	[[supplier_a...
152,162,416	2,993.8	PurExactDeli...	Days Invento...	0.07	0.26	€50,825.06k	€2,277,224.4...	[[part_a_b_c...
141,023,744	14,585.9	Delivered On...	Days Invento...	0.10	0.31	€9,668.50k	€1,458,552.4...	[[customer_i...
128,455,368	13,286.0	PurExactDeli...	Days Invento...	0.06	0.25	€9,668.50k	€2,082,220.8...	[[cus

And the Focus view gives the details behind the Ranker table. And all within seconds.



Instantly Live

NEMO doesn't need any customization. Even chart-of-account or financial calendar are not needed for NEMO to function.

New and Changed Features

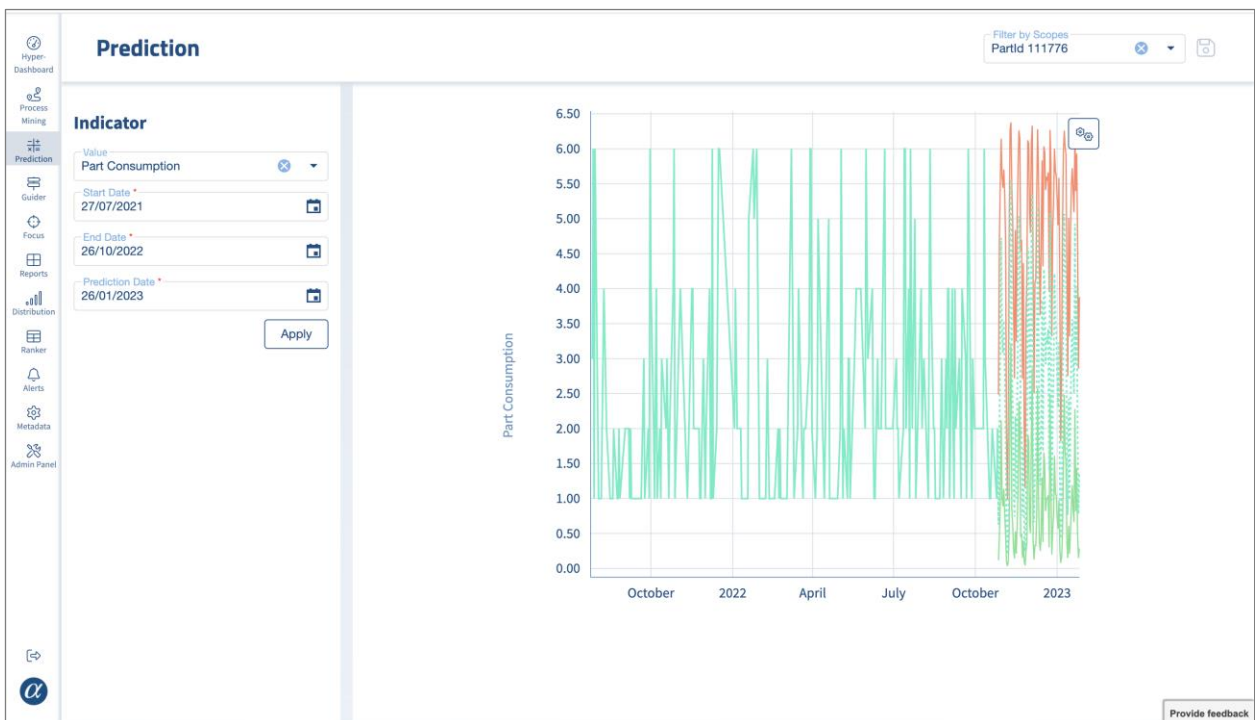
Metrics (NEW and IMPROVED)

While working with various customers several new metrics emerged. These are now being released to all customers, too.

Part Consumption (IMPROVED)

Reflects the total consumption of goods.

Calculation: The sum of consumption quantity from movements.



DIO (IMPROVED)

DIO calculations are more precise on detail level now.



Reports (NEW and IMPROVED)

(SAMPLE) Part Consumption (IMPROVED)

This report is the counterpart to the metric "Part Consumption".

The screenshot shows the 'Reports' interface with the following settings:

- Filter by Intervals:** Entire Period
- Filter by Scopes:** All Data

The table displays the following data:

Part id	Part desc 1	Number of sales or...	Total usage	Average safety stock	Average replenishme...
10190	100% Dynamite (1990,...	3133			0
10191	100games: Luchsie fer...	1870			0
111774	007: Agent Under Fire ...	786	2178.00	0.00	27
10001	100 Smash Win95 Ga...	737			0
111775	007 Ice Racer (2002, L...	558	1580.00	0.00	17
111772	2004 Real Soccer (200...	397	1204.00	0.00	32
111776	123 Free Solitaire For ...	358	979.00	0.00	32
111771	007: Licence to Kill (19...	343	1265.00	0.00	14
10064	1000-nen Okoku (1986...	333			0
10074	1001 Tangram Puzzles...	295			0
10076	Adiboo & Paziral's Sec...	276			0
100655	3D Driver (1999, Unkn...	272	1112.00	3.41	12
10085	100% Classics 2 (2005...	270			0
103560	3-D Frog Man (1998, R...	260	5757.00	0.00	30
10075	Adidas Championship ...	253			0
104408	007: Nightfire (2002, A...	249	3584.00	0.00	7

Focus (NEW)

Defined Columns Infoscape (NEW)

The Defined Columns Infoscape is the latest member of the Infoscape family of Focus. As its name already suggests it's now possible to view all Defined Columns and Exported Columns they are based on in Focus as well. This will greatly help following the numbers of NEMO.



Compatibility

NEMO is compatible with all ERP releases from 6.1 onwards.

Functional Limitations

Following functionality is restricted as of now:

- Updating of Reports is not supported yet.
- Calculations of Driver and Indicators are not based on Intervals yet.

Component Status

- Scopes with ranges don't work in Process Mining yet.
- Intervals don't work in Process Mining yet.

Known Issues

- Depending on the amount of business documents to be processed, there might be timeouts in Process Mining. Please attempt to reload or limit the volume of data via scopes or less business events.
- Depending on the volume of process variants to be captured in a temporary scope, there might be failures due to limitations of the underlying database. In this case, please reduce the amount of to be inspected process variants.

Documentation

Apart from this Release Letter, the following documentation is available.

- NEMO Glossary 2022-10-28 (no update)
- NEMO Data Structure 2022-10-28 (no update)
- NEMO Formula Syntax 2022-07-22 (no update)

Availability

All customer environments have been updated already.