# Market Study Supply Chain Optimization Vendors

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**Surveyed vendors:** Slimstock, Anaplan, Relex, SAS, ToolsGroup, Dassault Systems, SAP, Netstock, Vekia, GAINSystems, o9 solutions, Blue Yonder, Infor, John Galt, Lokad

Study participants: Lokad

This document is market research study formatted as a vendor-on-vendor assessment. The study focuses on the supply chain optimization segment among enterprise software vendors. By 'optimization', we refer to quantitative methods of any kind to bring measurable improvements to the supply chain performance. Many vendors deliver predictive optimization, however, this study also covers non-predictive approaches. This study deliberately puts aside supply chain management capabilities dealing with workflows and transactional aspects of supply chain operations. Nevertheless, vendors that feature 'management' capabilities are eligible for this study, as long as they have 'optimization' capabilities. For those vendors, answers should focus on the 'optimization' part of the offering, and ignore the 'management' part.

**Include (examples)**: Inventory Optimization, Demand Planning, Demand Forecasting, Lead time Forecasting, Allocation and Replenishment Optimization, Production Planning, Production Scheduling, Transport Optimization, Pricing Optimization, Promotion Optimization.

**Ignore (examples)**: Enterprise Resource Management, Material Requirement Management, Customer Relationship Management, Supplier Relationship Management, Product Lifecycle Management, Product Information Management, Electronic Data Interchange.

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## How to be included in this study

Any enterprise software vendor that operates in the segment of supply chain optimization is eligible. Answers must be given in plain text English without any formatting. Your answers to the two questions below should be sent to 'j.vermorel@lokad.com'.

#### **Question A: Present yourself**

1000 characters max, 1 paragraph.

#### **Question B: Present competing vendors**

paragraph per vendor.
characters max per vendor.
or more vendors must be presented.

The first word of every paragraph should be the name of the vendor you are assessing in the paragraph. The list of competitors should be ordered. The list starts with your best most admired peers, and ends with the least relevant ones.

Both questions A and B must be answered to be eligible for inclusion in the study. Please also include your:

- Company name
- Company URL
- Contact name and title
- Optional: an email address (will be made public in this report)

Answers will be published AS IS. The publisher does not endorse or support the views of any vendor except its own. The publisher reserves the right to not publish a copy if the vendor is not deemed to even operate in the supply chain optimization segment. Common sense restrictions apply as well (e.g. professional tone).

Answers can be refreshed by any vendor at any time. Please keep in mind that this report is manually maintained, hence, updates won't appear in real time.

## Vendor's ranks

Vendors are sorted by synthetic rank (the lower the better) or srank.

The synthetic rank is computed as the average of the normalized ranks given by peers. For example, if vendor A has three reviews 1 of 5, 2 of 10 and 3 of 4, then the synthetic rank of this vendor is (1/(5+1) + 2/(10+1) + 3/(4+1))/3 = 0.383. The +1 ensures that even the last ranked vendor has a *srank* strictly lower than 1.0.

A vendor that has no peer review has a *srank* of 1.0 by convention.

## Vendor's briefs

## Vendors are listed by *sranks* from best (0.000) to worst (1.000).

How to be included in this study	1
Vendor's ranks	1
Vendor's briefs	2
Slimstock (srank: 0.066)	3
Anaplan (srank: 0.133)	4
Relex (srank: 0.200)	5
SAS (srank: 0.266)	6
ToolsGroup (srank: 0.333)	7
Dassault Systèmes (srank: 0.400)	8
SAP (srank: 0.466)	9
Netstock (srank: 0.533)	10
Vekia (srank: 0.600)	11
GAINSystems (srank: 0.666)	12
o9 solutions (srank: 0.733)	13
Blue Yonder (srank: 0.800)	14
Infor (srank: 0.866)	15
John Galt (srank: 0.933)	16
Lokad (srank: 1.0)	17

Slimstock (srank: 0.066)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 1 of 14 by Lokad (2021-03-26)

Slimstock (1993) features the Slim4 app for forecasting and inventory optimization. Slim4 features extensive well-organized capabilities along the lines of the mainstream supply chain theory (safety stock, EOQ, etc). It's refreshing to see a vendor who focuses on simple to-the-point practical solutions rather than making vague "AI" claims. Features are aligned with mundane but critical practicalities of supply chains.

Anaplan (srank: 0.133)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 2 of 14 by Lokad (2021-03-26)

Anaplan (2006) delivers the enterprise SaaS version of Microsoft Excel. Hyperblock (Anaplan's core tech) is cool and qualifies for the title of Excel 2.0. Anaplan has verticalized its marketing toward planning use cases, although technically, forecasting and optimization are both second class citizens in the Hyperblock landscape. Nevertheless, as Excel remains the No1 tool in most supply chains, a better version of Excel is a valid tech proposition.

Relex (srank: 0.200)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 3 of 14 by Lokad (2021-03-27)

Relex (2005) specializes in retail optimization. The in-memory design, similar to a BI cube, provides impressive real-time reporting capabilities but guarantees high hardware costs. This real-time design is at odds with network-wide optimization and retail demand patterns like substitutions and cannibalizations. Ubiquitous claims of 99+% B2C retail on-shelf availability are disproved by routine surveys done by the ECR associations. Forecasting tech appears to be pre-2000 models.

SAS (srank: 0.266)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 4 of 14 by Lokad (2021-03-27)

SAS (1976) is a respected software company. SAS employs some of the most talented software engineers of the industry. The flagship app 'SAS Studio' features a DSL (domain-specific language), also named 'SAS' dedicated to statistical modeling. The DSL dates back from the late 1970s. The Jupyter notebook is now a superior open source alternative but SAS remains a pioneer who paved the way for a whole new generation of tech.

ToolsGroup (srank: 0.333)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 5 of 14 by Lokad (2021-03-26)

ToolsGroup (1993) features the SO99+ app for forecasting and inventory optimization. ToolsGroup features extensive supply chain capabilities, however their claims of "AI" are dubious. Public materials hint at pre-2000 forecasting models. Since 2018, probabilistic forecasts (PF) are advertised alongside MAPE reductions, which is inconsistent as MAPE does not apply to PF. Claims about "demand sensing" are also unsupported by scientific literature. Dassault Systèmes (srank: 0.400)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 6 of 14 by Lokad (2021-03-26)

Dassault Systems (1981) features Quintic, a 2014 acquisition. Quintic operates through a DSL (domain-specific programming language) named Quill. This DSL appears to feature mathematical optimization capabilities, but little on the forecasting front. Designing a DSL is difficult though and demonstrates serious deep-tech proficiency. Yet, the lack of public materials about Quill suggests an aging technology.

SAP (srank: 0.466)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 7 of 14 by Lokad (2021-03-26)

SAP (1972) acquired SAF AG (2009), KXEN (2013), SmartOps (2015), which were all operating in the 'predictive supply chain' arena. These apps come out on top of the in-house tech: SAP F&R, SAP APO, SAP HANA. Enterprise software isn't miscible through M&A though, and under the SAP banner lies a haphazard collection of products. Complexity is high and the very best integrators - plus a few years - will be needed to achieve success.

# Netstock (srank: 0.533)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 8 of 14 by Lokad (2021-03-26)

Netstock (2009) is a SaaS web app. Pricing is not public but feels very affordable. The app features native integrations, for data retrieval, with multiple ERPs that also target SMB. The app positions itself as a replacement for spreadsheets used to pilot stock levels through forecasts. Forecasting capabilities are minimal and are intended for small businesses. It's one of the most accessible 'demand forecasting' apps on the market.

Vekia (srank: 0.600) No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 9 of 14 by Lokad (2021-03-26)

Vekia (2007) is a French player that raised +14M€ of funding (notable in France). Since 2018, Vekia promotes probabilistic forecasting. Public materials give away very little on the tech itself. Based on public engineering job descriptions, the Vekia stack includes bricks such as Spark, ML in Python and Tableau, which feel appropriate for the task at hand.

GAINSystems (srank: 0.666)

No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 10 of 14 by Lokad (2021-03-26)

GAINSystems (1971) appears to be moving toward optimization as a service, giving a reasonably good vibe as far as supply chain expertise is concerned. Forecasting models used are classics (pre-2000). The claims of superior accuracy are dubious. Techniques like 'demand sensing' are vaporware, and unsupported by scientific literature. In addition, the ML elements put forward, such as matching and clustering, are also pre-2000 techniques.

o9 solutions (srank: 0.733) No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 11 of 14 by Lokad (2021-03-26)

o9 solutions (2009) is the archetype of the big tech vendor. The tech mass of o9 is off the charts, even by enterprise standards. The in-memory design guarantees high hardware costs. Many forecasting claims about the graph database, branded EKG, are dubious and unsupported by scientific literature. Tons of AI hype, but elements found on Github hint at pedestrian techniques. Trivialities don't qualify for "AI" because they are interactive.

Blue Yonder (srank: 0.800) No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 12 of 14 by Lokad (2021-03-26)

Blue Yonder (1985) is the outcome of a long series of M&A operations. Enterprise software isn't miscible through M&A however, and under the BY banner lies a haphazard collection of products, and most of them dated. BY prominently features AI, however, claims are vague with little or no substance. The few public BY open source projects on Github (tsfresh, PyDSE and vikos) hint at pre-2000 approaches: feature extraction, ARMA, linear regression.

Infor (srank: 0.866) No vendor self-assessment provided.

## **Peer reviews**

#### Ranked 13 of 14 by Lokad (2021-03-26)

Infor (2002) acquired Predictix in 2016, a forecasting specialist that had a complex legal history with LogicBlox, a key tech partner. At Infor, the forecast angle remained a second-class citizen, and appears to have been deprioritized over the last few years against its transactional products. Predictix attempted to bring a few post-2000 ML techniques to the supply chain, however it's dubious that those methods outperform pre-2000 forecasting models. The "AI" claims are also dubious.

John Galt (srank: 0.933) *No vendor self-assessment provided.* 

## **Peer reviews**

#### Ranked 14 of 14 by Lokad (2021-03-26)

John Galt (1996) features Atlas Planning. Unlike 'ForecastX' (another JG app), Atlas gives a strong vibe of consultingware. Forecasting tech seems dated. On the 'ForecastX' side, the claim that 'Procast' (proprietary algorithm) is more accurate than the competition is dubious, especially since Procast is absent from top ranks of large forecasting competitions like the M5 in 2020. Open source (cf. R packages by Pr. Rob Hyndman) most likely delivers superior accuracy.

Lokad (srank: 1.0)

By Joannes Vermorel, CEO Last revised: 2021-03-27 URL: <u>https://www.lokad.com/</u> Contact: j.vermorel@lokad.com

Lokad is a software company, founded in 2008, that specializes in predictive supply chain optimization. The company is headquartered in Paris, France - although the majority of our clients are based outside of France. Our tech is SaaS, multitenant and cloud based. In 2020, in the M5 forecasting competition based on Walmart sales data, Lokad ranked No1 world-wide at the SKU level among 909 teams (No6 overall). We pioneered probabilistic forecasting back in 2012, almost a decade ahead of the competition. Envision, a domain specific programming language - intended for the predictive optimization of supply chains - is the core of Lokad's technology. The fine print of our technology and our methodology is openly documented on our website www.lokad.com. Moreover, Joannes Vermorel, CEO of Lokad, animates a series of live supply chain lectures to be found on the Lokad TV channel on YouTube.

#### **Peer reviews**

No peer review provided.