

KNOWLEDGE SPACE

SUPPLY NETWORK PLANNING

KS.IBP ECOSYSTEM

Solutions for Integrated Business Planning

2 ЭКОСИСТЕМА KS.IBP



STRATEGIC PLANNING
& VALUE MANAGEMENT

ECONOMICAL & FINANCIAL
MANAGEMENT

INVESTMENT
& PROJECT MANAGEMENT

DEMAND & PROMO
PLANNING

SUPPLY NETWORK
PLANNING

DETAILED PRODUCTION
SCHEDULING

OBJECTIVES

- **Optimization** of supply chains at every stage
  Maximization of margin across the entire planning chain

TASKS

- End-to-end supply chain planning
- Automatic plan generation
- Balancing of production and logistics capacities
- Optimization of finished-goods inventory
- Selection of the optimal supplier of raw materials and components

4 ADVANTAGES AND KEY FEATURES

Automatic planning

- A wide set of built-in heuristics
- Ability to connect any external algorithms and optimizers
- High algorithm performance

Hard and soft constraints

- Material flow diagram
- Monitoring of key KPIs

Planner assistants

- Hints and warnings in online mode
- Flexible alert settings in each planning workbook
- Hard and soft constraints

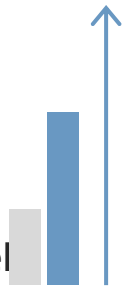
Integration builder

- A wide set of tools (databases, buses, APIs)
- Bidirectional integration with various systems (*WMS, TMS, maintenance systems, MES, ERP, etc.*)
- Data updates on schedule or in real time

5 IMPLEMENTATION IMPACT

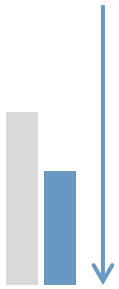
+20–45%

Increase of service level



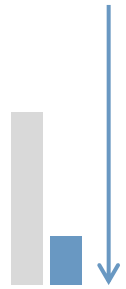
-10–30%

Reduction of finished goods inventory



-30–40%

Reduction of write-offs due to RSL (remaining shelf life)



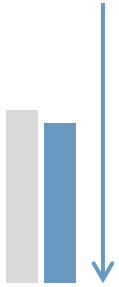
-50–70%

Reduction of shortages



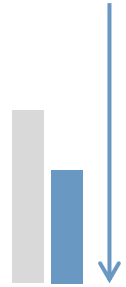
-2–5%

Decrease of logistics costs



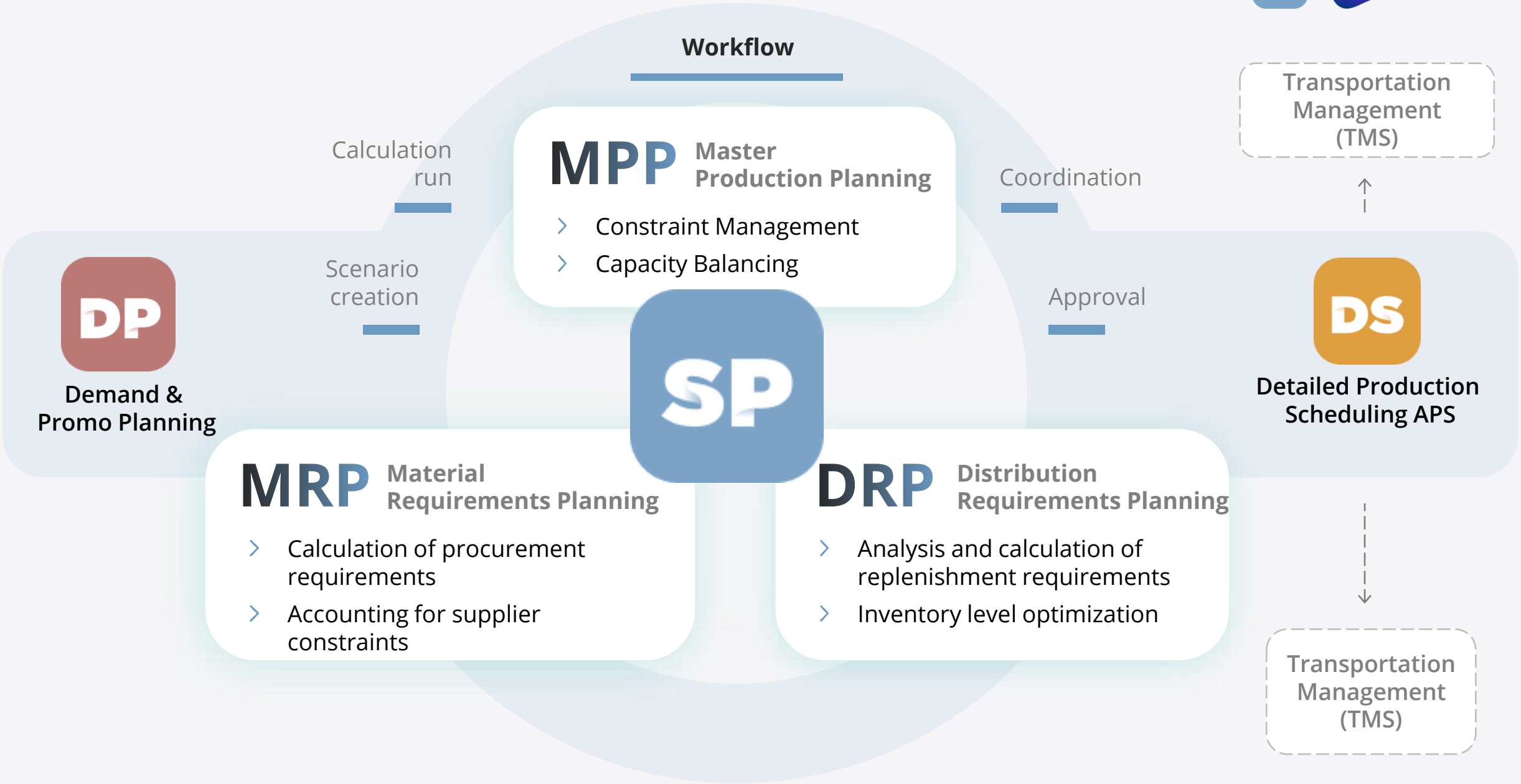
-20–35%

Reduction of planning time



SNP enables finding compromises between different business aspects such as availability and changing lead times, service level, costs, and margin, providing sustainable development and competitiveness.

6 SUPPLY CHAIN PLANNING



7 KEY FUNCTIONAL MODULES OF THE PRODUCT

Workflow Configuration

- Planning Scenario Creation
- Workflow setup *(calculation execution, adjustments, review, approval)*

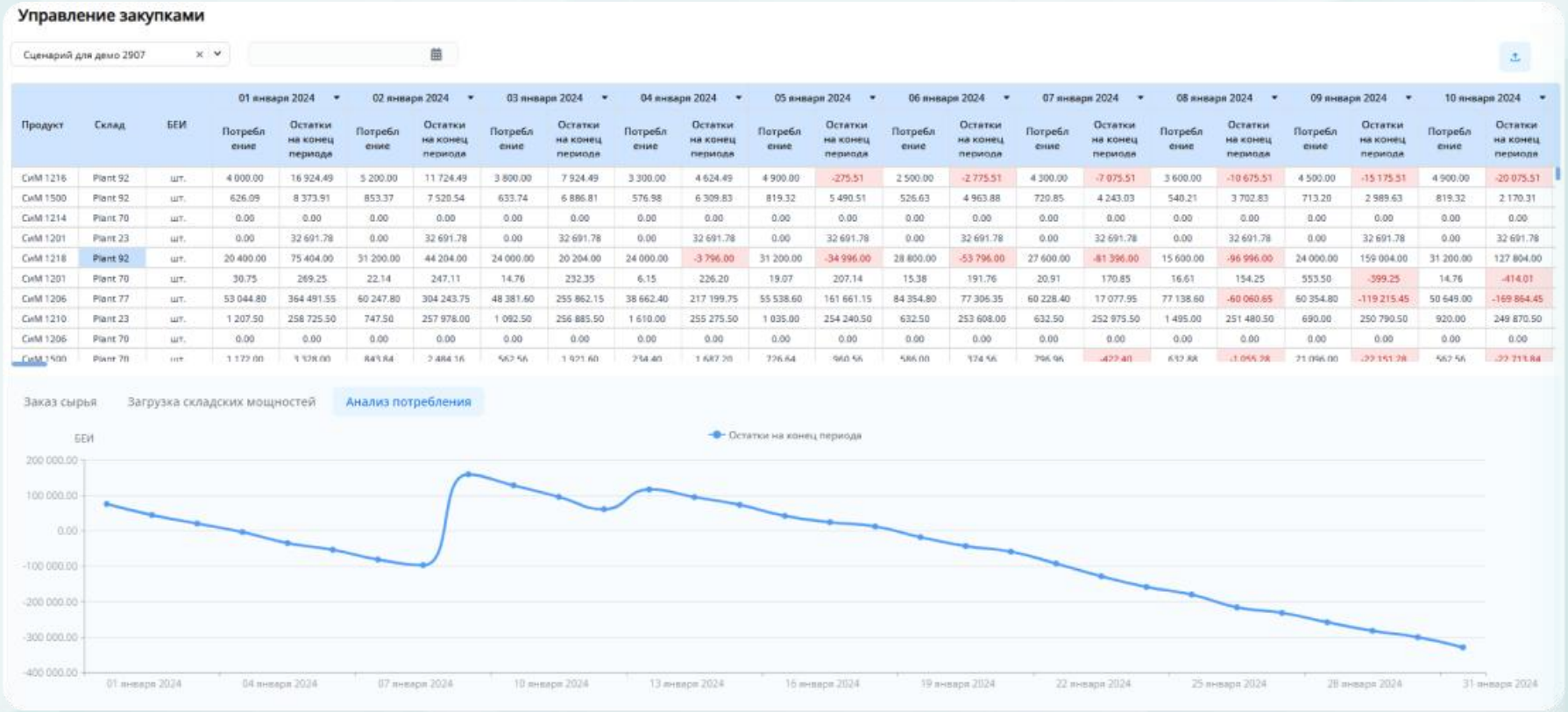
Planner’s personal dashboard

- Planning Book Management
- Automatic plan recalculation and manual adjustments

Plan approval

- Scenario Analysis with Built-in BI
- Integration with external BI systems and export of planning results
- Plan adjustment assignments (internal chat with notifications)
- Consolidation and approval of supply chain plans

8 DISTRIBUTION REQUIREMENTS PLANNING– DRP

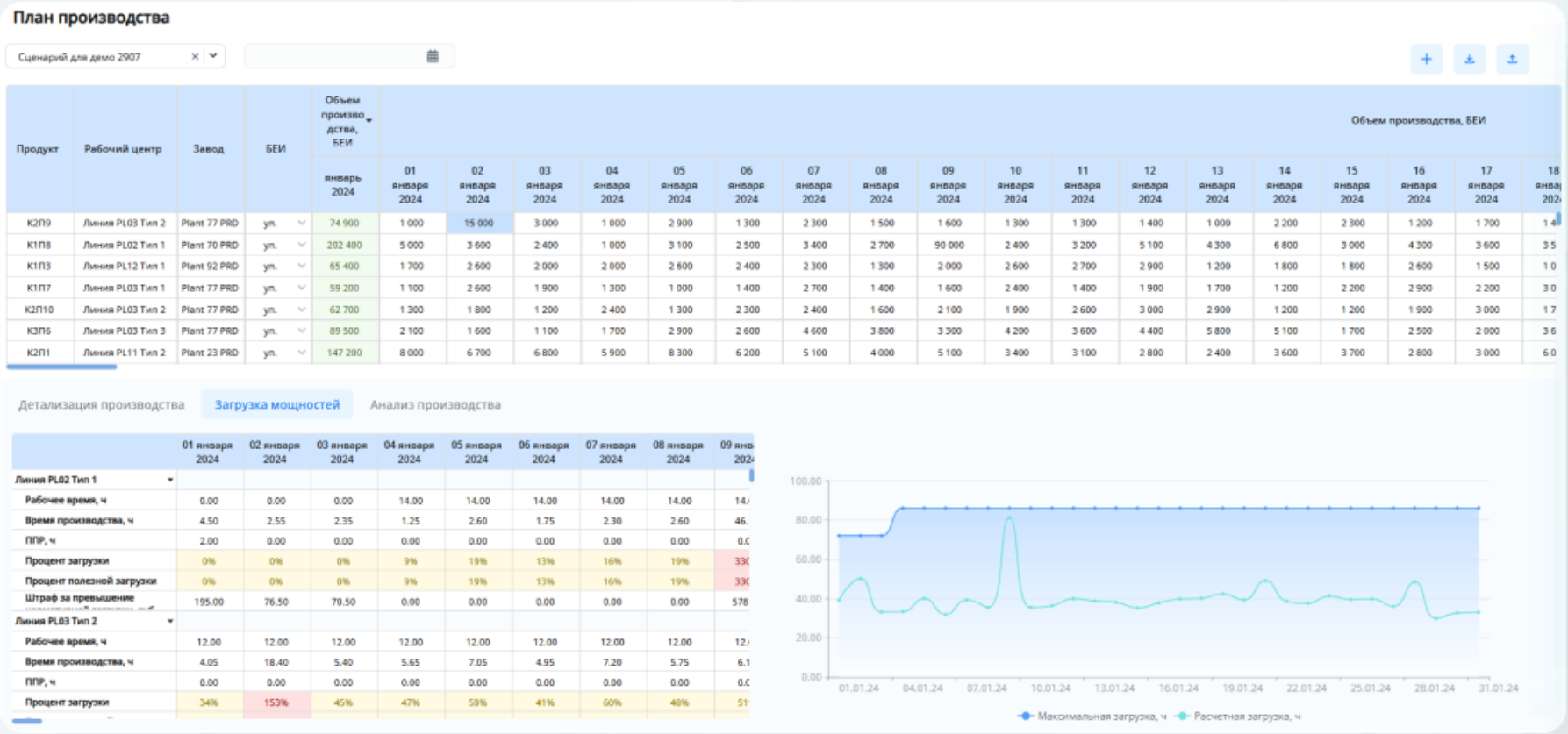


Functionality

- Finished goods inventory analysis
- Creation of shipment and transfer plans for finished goods
- Push/Pull replenishment strategies
- **Optimiztion**
  - Replenishment sources
  - Inventory across the supply chain
  - Vehicle/load planning

DRP → MPP → MRP

9 MASTER PRODUCTION PLANNING – MPP

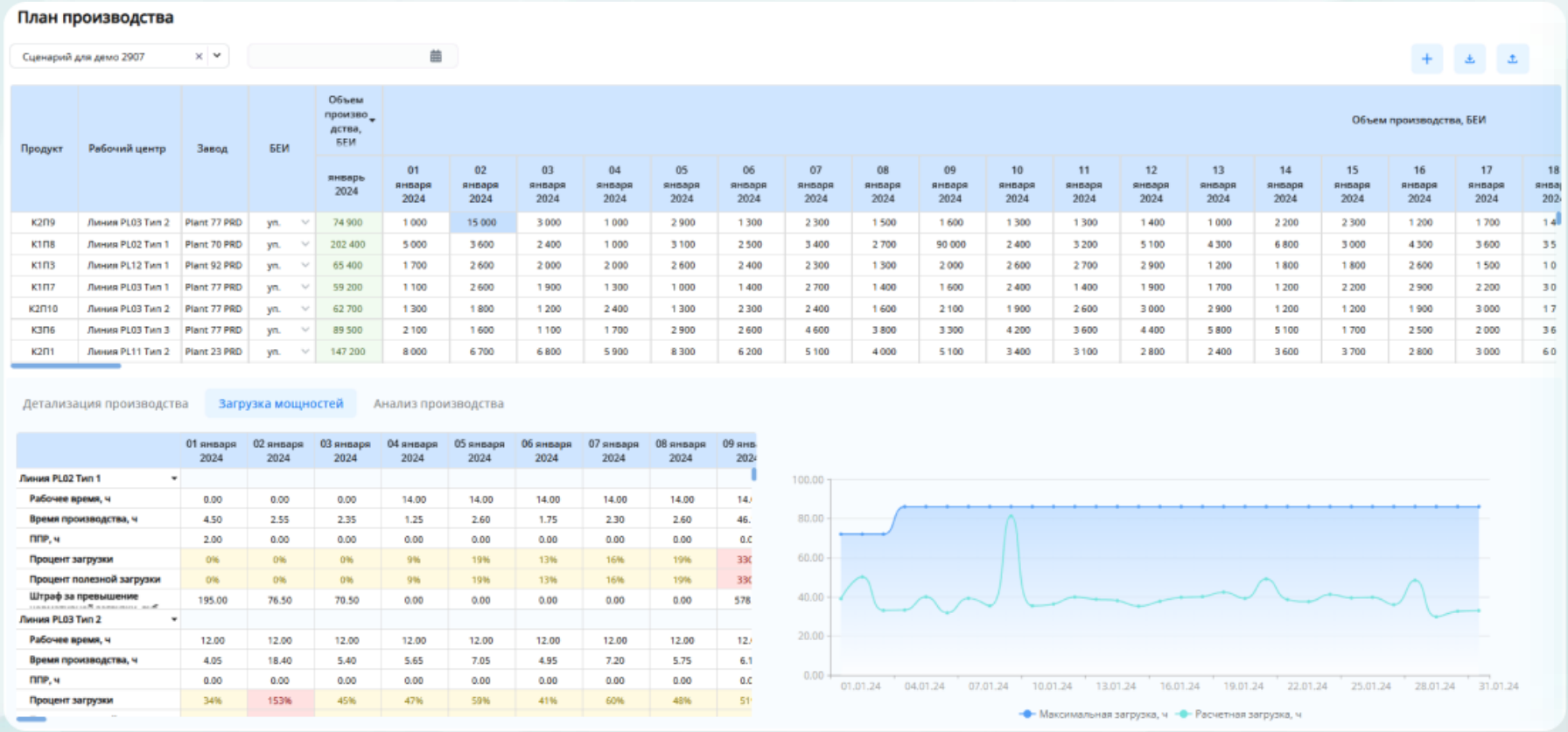


Functionality

- Production planning for forecast and order-driven scenarios
- Balancing production capacities across factories and/or work centers
- Automatic recipe selection (hard/soft relaunch)
- Constraint management (primary and secondary resources)
- Calculation of raw material requirements

DRP → MPP → MRP

MATERIAL REQUIREMENTS PLANNING - MRP



Functionality

- Analysis raw materials and supplies inventory
- Procurement plan calculation
- Replenishment strategy configuration
- Supplier constraint management
- Selection of the optimal supplier

DRP → MPP → MRP

Heuristic Approaches

- Multi-step, flexibly configurable planning heuristics
- Configuration of rules for selecting aggregates, recipes, and suppliers
- Calculation of safety stocks

Hard and Soft Constraints

- End-to-end optimization based on cost and priorities
- Planning of secondary resources and personnel
- Selection of the best supplier



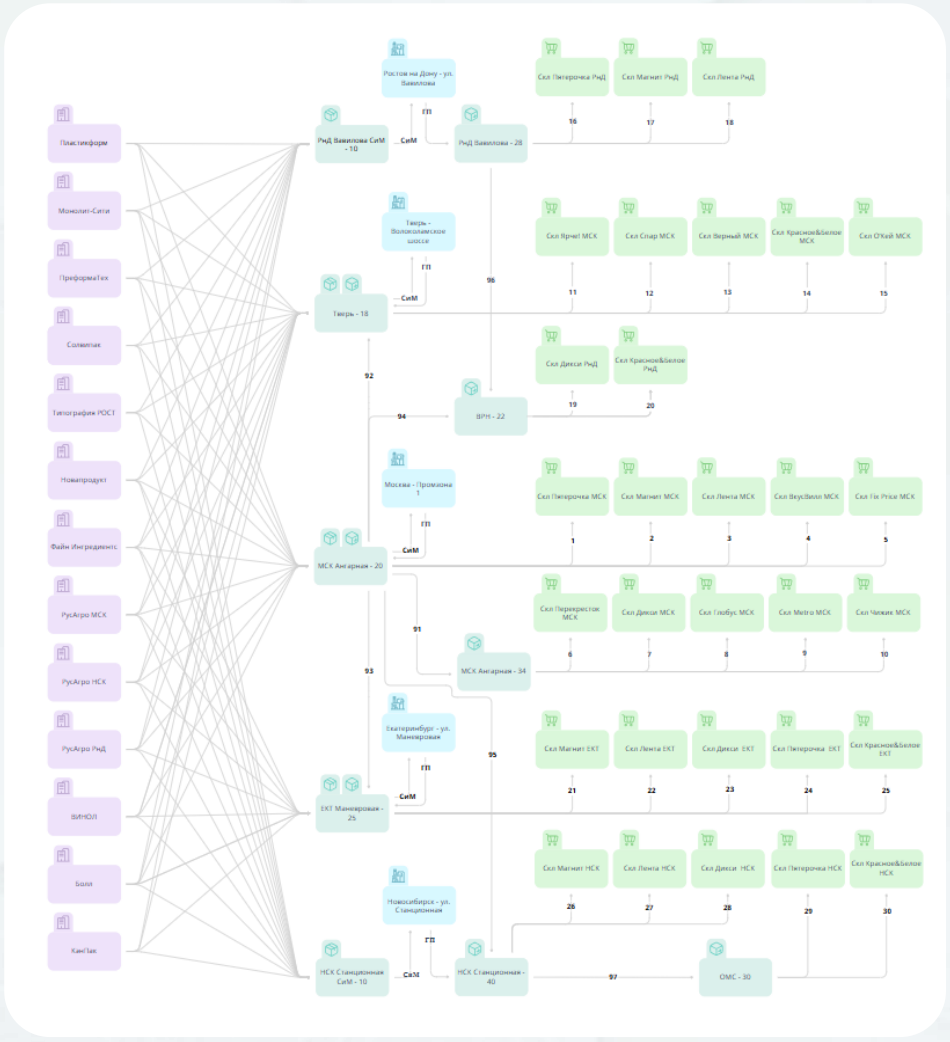
Automatic Error Identification

- Identification of possible causes for unmet requirements
- Recommendations for eliminating bottlenecks

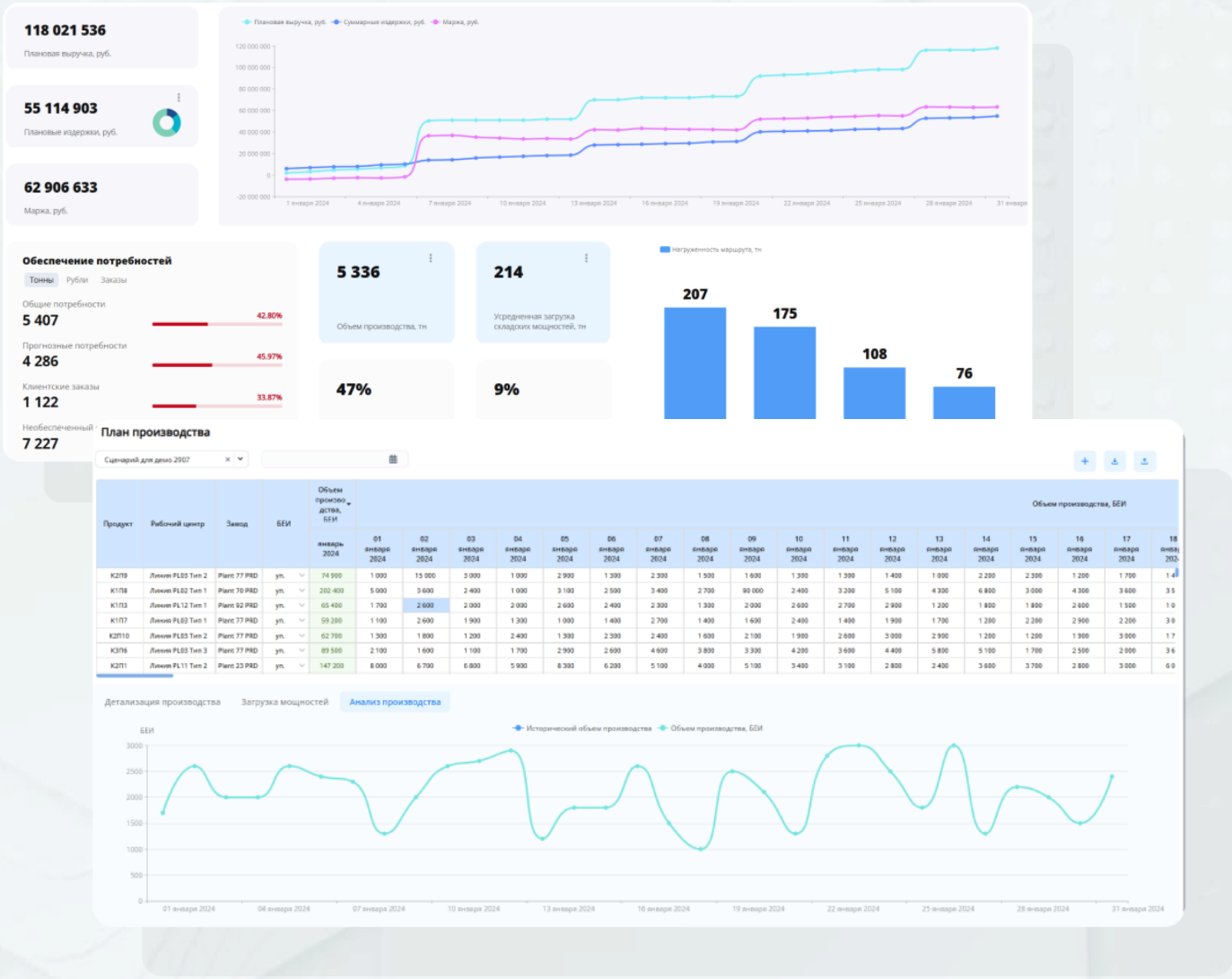
Integration Builder

- By user groups
- By product/factory/route groups

Supply chain visualization



Plan management



Thank you!

If you have any questions,
we'll answer them.



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