Woodstock Optimization Studio

Data-driven answers to critical business questions

Thriving in today's complex and changing business environments requires more agile and accurate decision-making. Decisions based on data that can help you balance objectives, consider constraints and achieve outcomes with less risk. Remsoft's optimization technology supports enterprise-wide use of prescriptive analytics that can address multiple supply chain challenges, including planning and scheduling, resource and asset management.

With optimization modeling, you can answer your critical 'why', 'how' and 'what if' questions to improve decisions, performance and create long-term competitive advantage.

Transform data into insight with prescriptive analytics

Optimize every facet of planning and scheduling, improving decisions, resource and asset management with Woodstock Optimization Studio.

Data-Driven Decisions
⊛

Make data-driven decisions by simulating alternative management scenarios to understand trade-offs among business objectives and constraints.

Dynamic Problem Solving
⊛

Analyze complex planning across many spatial and temporal ranges. Enable dynamic, optimized planning and re-planning that adapts to change.

Scenario and What If Analyses
⊛

Determine the right course of action by performing scenario and 'what if' analyses that consider different variables and possible outcomes.

Actionable Intelligence
⊛

Achieve performance improvements and increase competitive advantage with data intelligence that can guide decision-making and suggest the preferred course of action.

" Remsoft's software has given us the tools to effectively communicate different strategies to maximize value and also identify potential risks.

Remsoft Customer

Refined and innovated over nearly three decades, Woodstock is a fully integrated optimization modeling platform with robust prescriptive analytics capabilities.

Mathematical Optimization

Build, maintain, and deploy mathematical optimization models based on your planning and scheduling needs. Work with published models through focused, task-specific workflows and user-friendly interfaces. Iterate models as new data is available and adjust them as situations change.

Flexible Problem Solving

Solve short to long-term problems where sequencing and assignment of an optimal timing is fundamental to performant decision-making. Specify interval constraints and adjust parameters to maximize value and minimize costs.

Scenario & Capacity Analysis

Conduct deep analyses to optimize plans and schedules, allocate resources, and understand the opportunity cost of individual constraints. Assess the impact of changing resource levels on medium- and long-term financial performance to help prioritize resource investments.

Optimization for Lifecycle Forestry Planning

Remsoft offers purpose-built and adaptable optimization models for end-to-end forestry planning and scheduling activities, powered by Woodstock.

Land Asset Valuation

Timberland valuation, forest estate modeling and land use planning
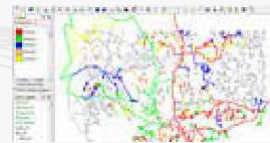
- Forest valuation
- Harvest and silviculture analysis
- Forecasting timber resource growth
- Forecasting product and environmental value

Strategic Planning

Forest and sustainability management planning

- Harvest and product planning
- Silviculture planning
- Discounted cashflow analysis
- Environment and policy assessment
- Risk analysis and mitigation
- Carbon management

Tactical Optimization

Short-term to mid-term planning, and scheduling optimization

- Coordinated harvest and road planning
- Wood flow and delivery planning
- Capacity planning
- Budget planning

S&OP Planning

Sales and operational supply-demand planning, and forecasting

- Harvest and crew scheduling
- Delivery scheduling
- Sales planning
- Procurement planning
- Product inventory planning

Optimization for Infrastructure Asset Management

With Woodstock, you can build sophisticated optimization models for improving infrastructure asset planning and investment decisions.

Infrastructure Asset Management

- Investment evaluations
- Asset reliability optimization
- Replacement planning
- Capital investment deferral analysis
- Cross-Asset Optimization

Why Prescriptive Analytics?

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Powerful, actionable decision-support for complex planning and scheduling challenges

Prescriptive analytics transform data into reliable insight, and foresight, that's easy to understand and put into action. While other analytics can help you answer the 'what' and 'why' it happened, only prescriptive analytics can answer 'how can we make it happen?' — enabling you to continually optimize and adjust plans, and monitor the progress of the plan's execution.

"Prescriptive analytics is the application of logic and mathematics to data to specify a preferred course of action. While all types of analytics ultimately support better decision-making, prescriptive analytics outputs a decision rather than a report, statistic, probability or estimate of future outcomes."

Gartner, Forecast Snapshot: Prescriptive Analytics, Worldwide,2019

The benefits of planning with prescriptive analytics

Remsoft software uses prescriptive analytics to help you bring critical efficiency, precision and agility to your planning, and supply chain decision-making.

Drive new efficiencies
⊛

Streamline and automate planning workflows to make decisions less effort and greater accuracy.

Get more clarity to plan smarter and discover new ways to operate more efficiently.

Plan with precision
⊛

Take the guesswork out of planning and improve the chances of getting things right the first time.

See how even small adjustments can have a big impact on your business bottom line.

Respond with agility
⊛

Optimize at every planning stage to quickly adapt to change and get the most from every opportunity.

Model and test scenarios to solve complex problems, and uncover new ways to move your business forward.

Put insights into action
⊛

Connect people with data and analytics to put the power of intelligence into everyone's hands.

Create insights more quickly and efficiently, enabling decision-makers to act with confidence.

Tap into the power of Remsoft's mathematical optimization technology to improve decisions and performance.

Remsoft optimization technology automates and streamlines planning workflows.
We use mathematical optimization with prescriptive analytics to transform data into reliable insight that's easy to understand and put into action.

Highly Adaptable Models

Build, maintain, deploy, and analyse complex mathematical optimization models based on your unique business needs.

Data-Model Connectivity

Dynamically update models and create scenarios from a database to reduce manual effort and improve reliability.

Supports Continuous or Integer-variables

Leverage best-in-class third party solvers and represent planning decisions with continuous or discrete choices.

Cross Asset, Cross Industry Application

Flexibly adapt to any type of high-value asset, spatial and temporal range to enable prescriptive analytics solutions.

Scheduling Problem Solving

Solve medium to short-term problems where sequencing and assignment of an optimal timing is the fundamental decision.

Holistic Value Chain View

Minimize inefficiencies down the value chain by including an enterprise-wide view, from the field to facilities.

Value Added Professional Services and Support

Whether you're just getting started or working towards a goal,
Remsoft can help you drive results faster.

Implementation and Consulting

Remsoft experts are available to provide guidance and actionable insights to help you achieve results. We can help you maximize the performance of your model to meet planning goals.

Responsive Support

Our support professionals understand the intricacies of planning as well as analytics. We're always available to answer questions and help you achieve critical outcomes with our software.

What can we help you achieve? Learn all the ways you can benefit from using our analytics software to improve performance and meet your business objectives. **www.remsoft.com/get-started**