Areté Inc.
Avail Fact Sheet

Avail is an integrated suite of Supply Chain planning tools created to work within the beverage industry. Avail is the latest in a long line of proven Areté products that have been successfully implemented in hundreds of manufacturing sites and distribution centers around the world.

A complete Avail system consists of six integrated modules that help plants schedule production, schedule syrup batches, order raw materials, place full goods orders, generate product deployments to distribution centers, and provide historical inventory reconciliation and variance reporting. These six Avail modules share a common master data framework that fully describes all product-location combinations scheduled; the Avail system can be installed on several network architectures (application, file, or terminal server) for easy access across the enterprise. Modules can be implemented simultaneously or rolled-out in separate, distinct phases as required.

Production Scheduling

Avail Production Scheduling helps plants plan production runs for the right time and in the optimal quantity. It will help a production planner identify capacity issues, generate and manage a schedule and produce reports detailing scheduled production and batching activity.

Avail's innovative Production Schedule Timeline offers the ability to schedule production using multiple views with which to evaluate and manipulate the schedule. The Timeline's flexibility allows you to visualize the consequences of several potential production scenarios to determine the best one. Using proprietary sistering techniques, Avail enables you to achieve significantly improved production efficiency by synchronizing the scheduling and quantities of packages that are run simultaneously or back-to-back so that both will run out together.

Syrup Scheduling

Avail Syrup Batch Scheduling is designed to schedule and keep detailed account of syrup batches. It gives users the ability to view and print batching tickets, batch logs, and formula books.

Users enter a formula for each type of syrup they batch. The formula includes a bill of materials (ingredients) and a set of quality control standards such as target brix and pH. Given the code of the syrup, the number of units to make, and the current brix of the sweetener (if used) the system will print a *batching ticket* that details the quantities of all ingredients needed.

By calculating quantities of each ingredient automatically, Avail's Syrup Scheduling Module dramatically decreases the likelihood of a costly mistake in the syrup room. The system uses internal formulas to determine the proper ratio of sweetener and water to achieve the targeted brix in the final syrup, and to generate a standard batching sheet for each batch of syrup to be created.

Raw Material Scheduling

The goal of Avail Materials Scheduling is to create an effective raw material delivery schedule for a production system. Material deliveries must occur in a timely fashion, and in the proper amounts, to meet all future material usage resulting from all scheduled production runs.

As the weekly production schedule is finalized, Avail automatically extends the schedule several months into the future and then 'explodes' all scheduled runs through each product's bill of materials to calculate expected future material/syrup usage. All currently scheduled material deliveries are then re-evaluated against expected usage to determine what action (accelerate, postpone, cancel) is necessary. New deliveries will then automatically be generated, bringing materials into the plant on a just-in-time basis or a specified number of hours/days before they are required.

The Avail Material Schedule can quickly be regenerated as required if demand, scheduled production, or material availability unexpectedly change. Vendor-specific truckload order schedules may be printed or exported from Avail for order placement.

Full Goods Order Scheduling

Avail Order Scheduling will generate/create Full Goods truckload orders for items purchased from outside co-packers/suppliers subject to supplier lead time constraints and varying ordering cycles. Avail OS features ambiguous order sourcing, that is, the flexibility of either rolling up demand from smaller locations into a hub location or sending the orders directly from suppliers to distribution centers depending upon the demand volume.

As a result of using Avail OS, you will be able to print out a future order schedule for distribution to each supplier to be faxed or e-mailed with new orders at the beginning of each ordering cycle.

Deployment Scheduling and the SafeGuard™ Deployment Generator

The primary goal of Avail Deployment Scheduling is to distribute product equitably in terms of days of supply among all sourced locations. A second objective is to maintain all warehouse inventories in a comfort zone between the Safe value set by the deployment scheduler and the Target Inventory Level value calculated by Avail. Because sales are often unpredictable, it is very important to utilize a deployment scheduling system that is capable of reacting quickly to unexpected shifts in demand while realizing the main objective of keeping all warehouse inventories within a comfort zone.

As long as floor space is available in the plant, it is perfectly acceptable to allow a warehouse inventory to fall below system average, assuming that surplus product resides on the plant floor. However, no warehouse should ever hold more than its 'fair share' of product because if one location is over-supplied, then another must be considered under-supplied and therefore more susceptible to stocking out. An unbalanced supply situation like this often forces the production facility to either pull back product previously deployed or produce prematurely to cover the warehouse that is short. In order to avoid this, Avail calculates System-Wide measures for each product and automatically deploys to achieve fair-share inventory across all locations. This deployment result ensures that all warehouses should run low at about the same time, and this allows a production scheduler to plan production that will satisfy system needs rather than producing to keep a single location from stocking out.

The Avail Deployment Module is also designed to help you schedule deployment from hubs to warehouses in the most efficient and practical manner possible. It can be used to create deployment scheduled for more than one plant within a sourcing system, and it can also be used in a sourcing environment that is entirely order-driven with no route sales or hub deployments. You can also generate all deployment bills in batch or choose to generate them one at a time as trucks arrive at the dock.

When SafeGuard™ is enabled, it allows Avail's deployment generator to further minimize the risk of stock-out across the source network utilizing statistical methods on forecasting error data. The basic approach of SafeGuard deployment is to allocate inventory in proportion to demand. In order to utilize SafeGuard functionality, users need to carefully set *Deployment Lead Days* for each warehouse from the plant, a factor which is dependent on travel time, load out windows, and when and how often deployment is scheduled. In addition, instead of setting a System Buffer DS for each product deployed from a plant, SafeGuard users need to set the *Target Service-to-Sales* level. This can be a single number for all products, or users can set product-specific numbers if desired. With Avail SafeGuard deployment, planning managers gain valuable assistance controlling inventory levels while ensuring the highest levels of availability for clients' most profitable products.

Inventory Control

Avail Inventory Control determines a reliable, projected inventory useful for scheduling when a physical count is not available or practical.

Production plants vary widely in the methods they employ to categorize and report inventory transactions. Avail allows each location to specify the ways in which products and raw materials are added to and subtracted from inventory. For example, a typical plant might choose to record only production, transfers in, and purchases as positive inventory activity transactions and only sales, production usage, and breakage as negative transactions. There may be two types of counting transactions, floor count and route truck count, recorded each day at a facility. Avail's Inventory Module allows the Inventory Controller to easily configure Avail to track only the kinds of activity relevant to this particular site and to produce reports that track variances of each of these types. From this data, you can determine the best course of action when resolving the inventory variances.

Within Avail, there are three means for creating inventory counts and transactions. First, Avail automatically converts all scheduled production, entered shipments and entered receivers into actual inventory events. Second, you can hand-enter counts and unscheduled transactions such as warehouse breakage, dumpage, donations, etc. directly into Avail, through Avail's efficient data entry forms. Third, you can import or merge most common inventory transactions through Avail's Application Program Interface (API) from external systems such as hand-helds, sales settlements systems, etc.

At the core of inventory control, you need the ability to generate reports against these various inventory transactions to see what needs to be managed. Avail's document-based inventory editors automatically post all activity into the corresponding Summary Columns that appear on Avail inventory variance reports. Avail calculates both line efficiencies and raw material yields. Calculated yields for ingredients such as concentrate and sweeteners can be broken down into batching and filling yields. Unit quantities can be multiplied out by standard cost to determine the dollar value of shrinkage and waste.

The Avail Inventory Module also tracks shipments into and from your facilities. There are detail and summary reports for Receivers and Shippers, showing total case counts shipped or received by all locations for a day, week, or period. These reports are invaluable when settling out with each satellite and vendor at the end of each week and period.

Resolving any discrepancies between physical counts is the general goal of inventory management. When calculating variance between any two physical inventory counts, Avail identifies the beginning count and accumulates all interim transactions to arrive at a calculated inventory at the ending date. The calculated inventory is then compared to the ending physical count for each item to identify variances. You then use Avail's Inventory Variance Summary report to calculate variances by day, week, period, etc.

BENEFITS OF AVAIL 6.0

Avail will help your manufacturing facilities to:

- Minimize Production Line Changeovers
- Reduce Syrup Batching Errors
- Reduce the Number of Production Schedule Changes
- Decrease Inventory Costs
- Substantially Reduce Out-of-Stocks
- Further minimize the risk of stock-out across the source network with the available SafeGuard™ Deployment generator, designed to utilize statistical methods based on forecasts and related data
- Improve Product Rotation and Reduce Dumpage
- Substantially Decrease Inventory Shrinkage
- Maximize Transport Loading Efficiency
- Improve Utilization of Logistical Assets such as Production Lines and Transports
- Centralize and Organize Enterprise Information

Implementation Process

Avail implementation is a five-stage process. This process can be simplified by installing Avail in phases, adding functionality over time. Similarly, with API integration, manual feeds may be temporarily used while automated feeds are developed and tested. If Avail is to be used across an enterprise, it may be implemented across the manufacturing facilities first, then across the distribution centers afterwards. Each stage of the implementation process is briefly described in the following table.

Stage	Timeframe	Goal
1. Evaluate		Determine site-specific objectives and needs, and then develop an Implementation Plan.
2. Prepare	1-3 Weeks	Complete Functional and Technical Questionnaires. Define, create and inspect API parcels, define inter-location connectivity and implementation plan.
3. Prework	2-7 Weeks	Prework training, load master data, test API routines.
4. Start-Up	2-5 Weeks	Complete user training and the Fully Integrated Test, enter initial working data, run in parallel with legacy systems, and complete system acceptance.
5. Live		Run Avail as primary system with remote support from Areté.

The specific tasks required along with the desired extent of an implementation are the key concerns addressed by our Implementation Plan. This custom-designed plan considers the scope of change from existing scheduling and inventory procedures, the sophistication of the user group, the complexity of the API interface, and the availability of IT, Operations and Areté resources for each individual client.

Maintenance and Support

At Areté, we strive to build a creative and constructive partnership with all of our clients. At the core of this partnership is proactive product support. Under the standard Maintenance Agreement, you have unlimited access to telephone support during business hours for problem troubleshooting or restoration of lost or damaged functionality. After hours support is available at a reasonable fee. The maintenance fees do not cover telephoning, training, custom specification or development, or consulting fees and expenses associated with site visits.

Pricing

Initial pricing for Avail is a client-by-client estimate based on, among other things, module and scope, i.e. Production Scheduling by Plant, Materials Scheduling by Plant, Deployment Scheduling by Hub, and Inventory Scheduling by Warehouse. The estimate is greatly determined by the client responses to the Functional and Technical Questionnaires that help us evaluate the client's specific needs and will also include consulting and training fees and expenses associated with any planned on-site visits by Areté personnel. Each implementation is unique and these figures vary widely depending on client needs. Once both Areté and the client agree to the plan, a contract is signed and work begins on the Prework phase of the implementation. Additionally each module has an initial license fee along with an annual maintenance and support fee. We do not offer support on a time and material basis.

Product Demonstrations

If you are interested in learning more about Areté solutions, please contact our office to set up a demonstration. We can provide a live, customized demonstration on your PC using WebEx™ while you conference by telephone with an Areté product expert.

Other Areté Products

PREVAIL 6.0

Areté's demand planning application, Prevail 6.0, is based on Café™, a powerful new automated forecasting engine that methodically looks for subtle relationships between different types of market information (Pricing, Promotions, Exceptions, Trends, etc.) and constructs multi-leveled models based on those that have historically predicted sales consistently. Unlike many other forecasting tools, Café imposes no defined limit on the number of models or causal factors that can be used in developing model hierarchies and regressions. Café allows you to define and manage these model hierarchies and regressions specific to the causal factors that drive demand within your business. You can also offset these factors so that forecasts can be driven off of events and pricing that have either just occurred, or are about to occur. Café intelligently uses these factors by detecting whether they should be included for each forecasting combination one by one, only choosing the factors that are driving the demand for that specific location.

Areté's approach not only works behind the scenes, but also provides planners with the tools they need to perform intelligent forecast analysis. For this purpose, Prevail 6.0 offers scores of forecasting process metrics. Planners can instantly define reports using the multi-dimensional Meta-Query engine. With this tool, planners can select ways to view the data based on location, product, market, or time hierarchies. The Prevail 6.0 Meta-Query Engine makes it simple to create reports including sales, forecasting accuracy, and error dispersion grouped by category, location, and timeframe.

Planners who wish to manage their own forecasting models can refer to a wealth of analytical information for assistance and edit the Café settings through a simple user interface. Café allows planners to utilize simulation techniques to find the best-performing Café configuration for their business. Areté consultants are also available to set up and periodically tune the settings as needed. Once the café settings are custom-configured, the system will work behind the scenes to create the forecast. Prevail 6.0 Café requires no additional daily tasks for the Prevail user.

SAFEGUARD™

SafeGuard™ is an inventory policy management tool and algorithm technology specifically designed to further minimize the risk of stock-out across a sourcing network. SafeGuard allows planning managers to properly manage inventory levels while ensuring the highest levels of availability for their most profitable products.

SafeGuard statistical data calculated by Prevail is integrated seamlessly into Avail so that Avail can minimize the risk of stock-out across the source network. These statistics are used in Avail's Inventory Policy Editor which is the primary tool used to manage policy settings such as reaction time, target service level and warehouse capacity. Various views of this information will help you make informed sourcing, SafeGuard service level and capacity utilization decisions that are central to establishing cost-effect inventory policy within an organization.

Need Additional Information?

Visit us at www.areteinc.com or contact us directly Monday through Friday 9:00am to 4:30pm Eastern Time.

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