



Food Batch/ERP Software Supports Beverage Manufacturer's Explosive Growth



CUSTOMER PROFILE



Since 1941, 3V has been manufacturing healthy, delicious fruit-based beverages (smartfruit), gourmet syrups (3Vclassic) and mixes (3Vfresh). 3V also offers co-packing and private labeling services.

- ✓ 500+ customers
- ✓ 300+ unique ingredients
- ✓ 45+ formulations
- ✓ 25,000 sq. ft. warehouse
- ✓ 10,000 sq. ft. manufacturing facility
- ✓ 40 employees

CHALLENGES

- Multiple paper-based batch & inventory systems
- Grow 3V
- Control quality and process consistency
- Inaccessible, insufficient, inaccurate data

SOLUTION

Mar-Kov Batch Control & Inventory Management Software

RESULTS

- ✓ Single, centralized MRP, MES and ERP platform
- ✓ Electronic batch records
- ✓ 400% growth to 1 million gallons/year
- ✓ Systematic, consistent quality and process control
- ✓ Easy, instant company-wide access to accurate data



Noah Merenfeld
COO, 3V Company

IN LESS THAN A DECADE, 3V GREW 400% TO 1,000,000 gallons a year because 3V's MRP and MES platform controls everything from inventory and quality to the production and delivery of its fruit-based mixes and beverages.

"Mar-Kov paid for itself by making 3V's progress and growth possible - before implementing Mar-Kov in 2015, we were flying blind most of the time," says Noah Merenfeld, COO, 3V, Clifton, NJ.

Consumers crave 3V year-round but demand skyrockets when temperatures soar. Consumers want instant gratification, so 3V has to reliably and accurately fill orders, and meet taste and quality expectations.

"Our ability to give customers what they want when they want it is super critical to the health and future of 3V," says Noah. *"Mar-Kov puts us in charge of every part of our business - raw materials and packaging, formulations and processes, production and delivery schedules."*

With Mar-Kov, 3V knows what orders have to be filled, when and for whom. The platform tracks the ingredients, bottles and labels needed to manufacture and pack each order. If 3V short ships a product, delivers late or stocks out, customers will turn to competitors to give consumers the strawberry and mango smoothies they want. Customer retention is important, because in this sector, customers rarely, if ever, switch back once they've found new suppliers.

VOLUME & COMPLEXITY REQUIRE ERP SYSTEMS

"Complexity necessitates organization and Mar-Kov helped us scale up as our business grew," says Noah. "We're no longer chasing our own tails, playing catch-up and looking for reports and materials."

A food manufacturer that depends on perishables, 3V relies on Mar-Kov to track expiry dates and schedule usage accordingly. That information can help 3V reduce waste and delivery costs. Mar-Kov also details the location of each SKU in the 25,000 sq. ft. warehouse with the 26 ft. ceilings. Finding raw ingredients, bottles and labels is now easier and faster.

Mar-Kov records production volumes, but it also ensures operators use the correct formulation and stick to 3V's proven manufacturing protocols and processes to maintain quality standards. The platform is like a traffic signal – it gets managers and operators to hit the brakes and ask: *"Did we make it well?" "Did we make it correctly?"* With the platform, operators can't skip a crucial step because they woke up in a bad mood or they're in a rush to get to lunch.

"We have a good atmosphere of systemization with Mar-Kov – we're speaking the same language and doing things the same way," says Noah. "Our processes and protocols aren't open to interpretation and there's no ambiguity."

After making the identical product thousands of times, year after year, operators tend to develop a bit of an attitude. Employees believe they know what they're doing and that they've found a better way. They may stop paying attention and start making mistakes that can cost 3V time, money and even personnel. With Mar-Kov, that's no longer an option.

DIFFERENT VARIETIES – DIFFERENT RECIPES

3V has multiple formulations for each product because fruit is a complex, global commodity. Around the world, growing seasons affect the availability and pricing on the countless varieties within each species. For example, each mango and apple variety has a unique taste, texture and color. As a result, 3V adjusts formulation proportions and ingredients to ensure each batch tastes, feels and looks the same. Together, Mar-Kov and 3V make sure consumers can't tell the difference between a smoothie made with Granny Smith or Pink Lady apples, honey/Ataulfo or Tommy Atkins mangoes.



CENTRALIZED DATA IMPROVES COMMUNICATIONS

Across 3V, the various departments are in sync because they're working with identical, centralized data. They're all using Mar-Kov whether they're ordering raw materials, handling customer orders, planning production or shipping finished goods. They have anywhere anytime access to current, accurate reports and data. If they need to know which raw ingredient went into a certain batch, and when the customer received it – Mar-Kov has the answers.

"Anyone in any department can use Mar-Kov to see where we're at – you can follow the flow from here to there," says Noah.

After years with multiple, paper-based systems, 3V employees were comfortable with the status quo. Yet over time, employees that consistently used Mar-Kov the way it's supposed to be used have unanimously agreed that's it's effective.

"Employees see the benefits of Mar-Kov when they learn how to use it and they also realize that the more they use it, the easier it is to use," says Noah.

ACCURATE, DETAILED CENTRALIZED REPORTS & DATA

Mar-Kov ensures 3V data and historical reports are accurate, current and accessible, which facilitates communication, tracking and transparency. Internally and externally, employees, suppliers, customers, service providers and even third-party auditors have the information required to do what's necessary.

On a regular basis, FDA, Safe Quality Food (SQF) and HACCP auditors check to confirm 3V complies with food safety standards. With Mar-Kov, 3V's batching records, relevant reports and accurate, detailed ingredient, process and facility data are available to the auditors.

"Mar-Kov's batching records address so many of the auditors' preliminary questions about how, when and where a lot was produced – they're impressed with our records and we're relieved at the ease of it," says Noah. "Mar-Kov really takes care of a lot of the heavy lifting."