

PRODUCT REVIEW

Artificial Intelligence Makes Its Debut in Cellar Software

New Capabilities in Cellar Management Systems Aim to Reduce Labor Hours, Improve User Experience

Sarah Brown

Meet the Author: **Sarah Brown**, staff writer, earned her B.S. in viticulture and enology from the University of California, Davis before working in winemaking at various wineries throughout Napa and Sonoma counties. Brown is a regular contributor to the *Wine Analytics Report*, *WineBusiness Monthly* and *winebusiness.com*, and has been writing creatively and professionally her entire life. A resident of Sonoma, Brown is also a partner in a local coffee shop and enjoys gardening, cooking and hosting dinner parties for friends when she is not writing about wine.

WINEMAKERS HAVE ENOUGH TO worry about. Juggling multiple projects and checklists, throughout the course of the year, means it is essential to have the right cellar management system. Whereas previous iterations functioned primarily as an alternative to paper records and Excel sheets, modernized cellar software is acting less like a records-keeper and more like a predictive, personal assistant for winemakers.

When speaking with *WineBusiness Monthly*, software developers reported a continued focus on providing frequent, valuable updates for their customers, but several companies have taken it a step further, integrating artificial intelligence and adaptive learning technology into their systems.

These developments, many of which were rolled out in 2025, allow cellar management systems to learn and adapt to the individual winemaker, lessening and streamlining their workload while reducing discrepancies.

The first round of winemaking software debuted more than 30 years ago; and since then, over a dozen different companies have entered the market. While figuring out which software to use might seem intimidating, i.e., how to choose the “right” or “best” one, there really is no wrong answer. Matt Witte, co-founder of Napa-based Blended Tech, said rather than being intimidated by the number of options, the competition between providers has driven advancements across the cellar management software market.

“Competition should spur new ideas,” he explained. “If it’s dominated by just one or two players, sometimes it can lead to complacency. If we continue to innovate and develop, it’s only better for the industry.”

Inspired by his love of wine and fueled by his tenure in the tech world, Witte co-founded Blended Tech with Scott Barta, who had a software development background. Witte, whose career has always seemed to be at the intersection of agriculture and technology, saw the wine industry was lacking in the complex technology necessary for winemakers to succeed.

“The industry was getting far more complex, and there was a huge amount of technology on the winemaking side,” Witte said, adding that he felt there wasn’t that same degree of technology on the cellar software side to match.

“Data and data-based systems can help companies run more efficiently and make data-oriented decisions.”

When speaking with winemakers, Witte found many were working with outdated systems that didn’t match their needs; the systems were adequate, but many winemakers were still keeping additional Excel documents and paperwork to manage day-to-day workflow.

Winemaking is nonlinear and data-intensive, Witte noted, which he found fascinating from a software perspective. Rather than approach the development of Blended based on features, he focused on workflow. “We wanted you to be able to talk to your wine system in winemaker, not software engineer,” he said. For instance, when managing fermentations, items in a checklist will gray out once completed, allowing for a quick visual representation of what still needs to be done.

The idea of cellar management systems being built “by winemakers for winemakers” was echoed by several other company representatives, including CEO of Crafted ERP, Jeremy King. Crafted was originally developed in 2017 as a cellar management system for breweries, but within six months, the team launched its first wine product.

“We hired winemakers who specifically knew what needs to happen,” said King of the development process.

In his research, some wineries were using up to nine different pieces of software for what they needed. Crafted combines all of these into one, vertically integrating vineyard management, winemaking, inventory and warehouse management, as well as bottling and finances. “The product will never be done,” he added, pointing out that they are always working on new features and integrations.

It was this mentality that brought King’s team to develop several AI functions for Crafted, which rolled out updates that centered on artificial intelligence in the last year. “We use AI everywhere, from data collection and loading software; you can have AI go in and mine data to create things that are useful for you.”

Blended’s artificial intelligence constantly adapts to user inputs and over time adapts to how they prefer to work.

“It’s very hard to design software for everyone,” said Witte, noting that with an evolving system, it can still feel like it was designed specifically for an individual user.

Crafted and Blended are not alone in their adoption of AI, with several cellar management systems now rolling out similar features. Most focus on simple tasks, like quick data retrieval and recording, but the hope, according to developers, is to make the systems act almost like an automated assistant.

You:
Record a new Free SO2 measurement of 17 for lot 2021-OAT-CabFranc

Barry:
Please review the following data to be record

Lot: 2021-OAT-CabFrance	Volume: 3125 gal	Vessels: BG-7
Date:	06/12/2025	Remove
Measurements:	Values	
Free SO2	17 ppm	
<input type="button" value="Record"/> <input type="button" value="Reset"/>		

Barry is an AI feature offered by Blended Tech.
This is the quick record feature.



Innovint's InnoApp allows key data to be shared between team members, no matter where they are.

In January of this year, Blended launched another AI feature: a helpful little assistant named Barry. It functions as an embedded chat feature; users can ask questions about recorded data, such as, "When did this lot finish malolactic fermentation?" or "What is the acid and TA on my Sauvignon Blanc?" The friendly little grape scours the system and reports back what he's found.

Barry can also report on when certain functions were performed on a lot or quickly record analysis.

The system's functionality is still in its early stages, according to Witte, but even so, some users have found new and interesting ways of using it. One user asked Barry to propose blends which maintained varietal dominance; within minutes, Barry generated a report for review.

The main goal of implementing AI, said head of sales for Innovint Emma Fladeboe, is ultimately to eliminate the administrative "bottlenecks" that currently exist in winery operations and keep winemakers from focusing on more important things.

"AI is a huge way to continue with freeing up winemakers' time for the actual job," she observed. Currently, Innovint has an AI feature called CooperAssist, which behaves similarly to other cellar systems' AI? pulling data, recording quick actions and answering on-the-fly questions. With future developments, CooperAssist will give winemakers back even more time. "Even if you're using a product, you're still doing a lot of work orders and typing," Fladeboe said.

Fladeboe shared that new CooperAssist features, which will roll out next year, will allow winemakers to use voice and photo capture to record data and even generate work orders.

President of Santa Rosa-based Orion Software, Jason Curtis, said his company will unveil their version of an AI assistant, which Curtis reported would act as a "virtual winemaker on top of the system," next year.

"Many winemaking packages only handle the winemaking aspect and maybe dip into cost tracking; then the finances have to be picked up on a back-office system," said Vintegrate founder, Hub Lampert.

Vintegrate and several other systems offer what Lampert calls "vertical integration," wherein every step of the winemaking process, from the beginning of the growing season all the way through selling the finished wine, can be tracked and managed.

"The fact that everything is integrated is huge," Lampert said of this type of system. "It's very helpful in terms of efficiency and consistency."

For wineries that purchase or sell grapes, finding a system which manages grower contracts and tracks grape sales could be a useful asset.

Curtis noticed just how difficult managing this element of the winemaking business can be and incorporated grape contract and grower payments into Orion. Other companies, like Vintrace and Innovint, which also have accounting suites, can share grower contract and payment data between departments.

With smaller production teams, a single person may need to manage shipping and fulfillment on top of other duties, so having these functions built into the cellar management system makes monitoring case goods easier. Cellar management software companies have responded to this pain point with new tools for case goods management and shipping logistics.

Innovint's Fladeboe said the company had received requests for a case goods management component for quite a long time, and now that element of the system is live.

"It allows users to see available inventory and where it is," she explained. Without frequent or accurate updates, stock can sometimes be oversold and misallocated, and that can be even more likely if a winery has a large DTC channel.

Orion's sister company, VinSuite, is a complementary system which specializes in DTC and e-commerce with the added capabilities of email tracking, POS hosting and wine club management.

Whatever cannot be accomplished in the system can typically be resolved through an integration with another program. "Winemaking is a nuanced business," said Innovint's Fladeboe. "It's important that you can 'speak' to all the regular business tools."

Several companies, like Vintegrate, already have preset integrations with other key wine business programs, like Commerce7 and Shopify, as well as other production software, including TankNET, Anton Paar and ETS, to further streamline workflow. Others have yet to establish native integrations, but said they were willing and able to work with customers to set them up with whatever systems they feel are needed for their success.

One Stop Shop Software

Gone are the days when cellar management systems only handled winemaking. Many now have the capability to manage everything, from "grape to bottle" and even into supply chain management and accounting, all before any integrations.

According to the WineBusiness Analytics Database, more than 80% of the wineries in the U.S. produce fewer than 5,000 cases annually. These wineries are typically small teams with individuals who wear multiple hats to keep production running smoothly. Having a system that carries the user from start to finish makes the whole process easier, with fewer redundancies between systems or recording methods, and ultimately saves time and headaches.

Artificial Intelligence Makes Its Debut in Cellar Software

Company	Year Founded, Location	At-a-Glance	Contact Email	Fruit & Vineyard Tracking	Winemaking & Cellar Management	Case Goods & Inventory Tracking	COGS Tracking	Dry Goods Tracking
Advanced Management Systems	1981 Santa Rosa, CA	A tried and true California-based company which works with wineries to accommodate custom programming with integrations that track cost of goods from fruit intake through sale of finished product, with added capabilities to track wholesale orders and analyze sales and profits.	sales@amssoftware.com	Yes	Yes	Yes	Unknown	Unknown
Acrolon Technologies (TankNet)	2000 Sonoma, CA	Wireless tank thermostats and other monitoring technology which can all be accessed remotely	info@acrolon.com	No	Yes	No	No	No
Blended Technologies	2022 Napa, CA	Matt Rite and Scott Barta, who combined have decades of experience in the tech world, developed Blended with the intent of bridging the gap between agriculture and technology, most notably with the introduction of "Barry", an AI assistant specifically for wine production.	hello@blendtech.com	Yes	Yes	Yes	Yes	Yes
Crafted ERP	2017 Denver, CO	Integrated operations powered by Netsuite and, the top cloud ERP in the world, and developed by Doozy Solutions, Crafted ERP can manage and monitor production of wine, beer, wine-based RTDs and low and no-alcohol beverages, allowing producers the opportunity to expand production beyond a single beverage.	cheers@craftederp.com	Yes	Yes	Yes	Yes	Yes
Ekos	2014 Charlotte, NC	Capable of tracking production for breweries, cideries, distilleries and wineries with robust integration with accounting, POS and ecommerce systems to "connect the dots" beyond production and digitize the entire supply chain.	info@goekos.com	No	Yes	Yes	Yes	No
Innovint, Inc	2013 Woodside, OR	CEO and founder Ashley Leonard spent nearly a decade as a winemaker before developing Innovint, bringing new meaning to "made by winemakers for winemakers." Innovint aims to provide easy, digital tools so winemakers spend less time behind the desk and more time making wine.	info@innovint.us	Yes	Yes	Yes	Yes	Yes
NuVerge (NuTrax Wine)	2018 Bloomfield, CO	Capable of streamlining wine production and operations from fruit intake to bottling and provides data and COGS for full-scope operational and financial	info@nuverge.com	Yes	Yes	Unknown	Yes	Unknown
Orion	1995 Santa Rosa, CA	Winemaking software with the capability to seamlessly manage large-scale winery operations with multiple facilities, ensure compliance and improve efficiency with additional integrations with sales and shipping partners.	info@orionwinesw.com	Yes	Yes	Yes	Yes	Yes
Process2Wine	2016 Santa Barbara, CA	French-founded company now offers its production tracking software stateside, allowing American winemakers to track own and custom crush production across multiple estates.	contact-na@process-2wine.com	Yes	Yes	Unknown	Yes	Unknown
Vintegrate	1986 Santa Rosa, CA	A cloud-based system which also has brewery, distillation deal-coholization functions and Datawatch, which aims to reduce costs and mitigate business risks	info@vintegrate.com	Yes	Yes	Unknown	Yes	Yes
Vintner's Advantage	1985 Eugene, OR	Vintner's Advantage follows an "a la carte" model, allowing for wineries to pick and choose modules as production grows and business expands; thanks to partnership with Bluefinity's Evoke for mobile development, Vintner's Advantage can be accessed via mobile device. The program also allows for expansions outside of wine production with brandy and spirits modules.	sales@miscorp.com	Yes	Yes	Yes	Yes	Yes
Vintrace	2007 San Francisco, CA	Australia-based software streamlines winemaking from grape to bottle, with winemaking, bottling and financial modules, with an extensive list of integration partners to further expand on the software's capabilities. Mobile app, additions calculator and blending simulator are some of the key features which help winemakers work efficiently and improve workflow and communication.	sales@vintrace.com	Yes	Yes	Yes	Yes	Yes

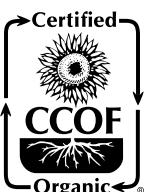
Cellar Management Software

	Finance Capabilities	TTB Compliance	Other Notable Features	Cost	Installation and Imports	Training and Support	Integrations	Notable Clients
	Yes	Unknown	Wholesale Order Processing Module, Distributor Sales and Depletions Module	Unknown	Unknown	Weekday support via phone or email, weekend emergency support, AMS "University"	Unknown	Unknown
	No	No	Cloud-based Temperature Control, Fermentation Tracking, Chiller Integration, Cellar Maps & Tank Groups, Schedule Pump Over and Aeration, Fermentation Reports	Rate dependent on Lite or Pro Version	Unknown	Unknown	Vintrace, Innovint, Orion	Gallo, Promontory, Harlan, Domain Chandon, Duckhorn Wine Co., Opus One, Scheid Vineyards
	Yes	Yes	Blending Simulator, Mobile Capabilities, Barry the AI Assistant	Starting at \$2,400 per year; based on size and complexity of winery, cases produced and number of locations.	Import via excel spreadsheets, Data loaded within 4-7 days, Onboarding within 1-4 weeks	Personalized training sessions, Dedicated success manager, Help center with informational articles	No native integrations, API-based systems capable of building most integrations	Antica Terra, Paloma Vineyards, Doffo, Robert Renzoni, Brooklyn Cider House
	Yes	Yes	Marketing, Sales and CRM capabilities, Bottling, Canning and Kegging Function, Supply and Demand Planning	One-time implementation fee to cover set-up; subsequent costs dependent on core platform's cost, number of clusters and additional modules	Migrate from any platform or via excel sheets, Quarterly system updates	Specialized training with onboarding, Customer Success Team	Commerce7, Shopify, Sovos ShipCompliant, VIP	Long Meadow Ranch, Far Niente, Stag's Leap Wine Cellars, Grgich Hills Estate, Justin, Scout & Cellar, Free Flow Wines
	No	Yes	Sales Features	Unknown	Unknown	Personalized onboarding, Live and on-demand training webinars, email and phone support, knowledge base articles	Fintech, Square, Microstar, iControl, GoTab, Commerce7, Kegshoe, VIP, Shopify, Xero, Intuit Quickbooks, Sage Intact, Ar-rayved	Juneshine, Magnolia Brewing, Linganore Wine Cellars, Drink This, Austin East Ciders, Societe Brewing Company, Thomas Allen Vineyards & Winery, Pedroncelli
	Yes	Yes	Blend Costing, InnoApp for mobile, Offline Capabilities, Cooper Assist AI Feature,	One time fee for migration, then subscription costs based on product, number of users	Migrate from any platform or via excel sheets	Standard and Premium Onboarding Experiences, As quick as two weeks to onboard; five weeks to go live	Anton Paar, myEnologist, Barrelwise, ETS, Commerce7, TankNet, WinePulse, Foss, Wine Lab, Vin Wizard, Cloud Space, Quickbooks	Ponzi Vineyards, Elk Cove Vineyards, DAOU, Hall Napa Valley, Turley, Trefethen, Shafer, Pride Mountain Vineyards, Mayacamas, O'Shaughnessy, Matthiasson, Inglenook, Jam Cellars
	Unknown	Yes	Winemaker Plus wine-making calculators, mobile capabilities	Basic, Plus, Enterprise Tiers with scaled costing	Unknown	Unknown	Native integrations with sales and financial	Unknown
	Yes	Yes	Blending Simulator	Blend starts at \$350 to \$1000 per month depending on size; WiPs for large scale production, Blend for smaller scale wineries	About six months to go live with WiPs; Custom developments available	Month-long training period following by staging, webinar library, support team	ShipCompliant, TankNet, VinWizard, JD Edwards, SAP, VinSuite, Quickbooks, Salesforce, Cellarpass	Trinchero Family Wine Estates, Pahlmeyer, Domaine Serene
	Unknown	Yes	Custom Crush Management, Multi-Estate Capabilities, Mobile Capabilities	Basic for Cellar starting at \$55 excluding VAT per month	Build winery in about three days, depending on size, live in a week; training starts in second week. Updates as often as every six weeks	Approximately 15 hours onboarding training	Unknown	Laurent-Perrier
	Yes	Unknown	Blending Simulator	Starting at \$220 per user per month	For winemaking only, takes about 150 hours to load winery	Designated Implementation Consultant, specialized training with onboarding, onsite support and IT Consulting	Unknown	Unknown
	Yes	Yes	Bulk Wine Sales, Bottling Module	Unknown	Software updates twice a year	Help Desk with extended Harvest hours	Unknown	Unknown
	Yes	Yes	Blending simulator, Wineadds.com free additions and conversions calculator	Essentials, Professional, Enterprise at different rates	Migrate from any platform or via excel sheets	Onboarding with multiple training sessions, regular training webinars, Vintrace Web with FAQs	Vincreative, ETS, Grapalink, Quickbooks, TankNet, Barrelwise, Thermo Scientific, ChemWell, Foss, VinWizard, Anton Paar	Silver Oak, Vineyard 29, Antinoria Napa Valley, Constellation Brands, Union Wine Co.

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Mobility and Mobile Devices in the Cellar

The goal of these cellar management systems is to reduce the time spent behind a screen so winemakers can return to making wine, but for the times when work has to be done in the cellar, having the capability to use software via a phone or tablet can be a big plus.

During the harvest at Tin Barn Vineyards in Sonoma, assistant winemaker Danielle Noce will delegate Brix and temperature measurements to a cellar intern. After measuring, the intern can easily track the values in the Vintrace app, which also notes the time of the sample. When making crucial fermentation decisions, like pump overs and transfers, Noce and winemaker Michael Lancaster know exactly when the last Brix reading was taken.

App versions of cellar software can be a handy tool, both during harvest and in the off season, allowing the user to complete a work order or record data without having to trek back to a computer. In some cases, as with Innovint's InnoApp, key data can be shared between team members, no matter where they are.

Some of Innovint's clients particularly like the fact that they can take photographs in the vineyard, during the growing season, in the app, and via its cloud-based system, team members back at the winery can see those notes and photos almost instantaneously. In places where WiFi can be spotty, like cellars and barrel halls, Flabedoe said the app can still work off-line. "You can record actions on the fly, and it pings back to the dashboard, eliminating a massive amount of administrative burden."

Barrel management is one of the most common features of the app versions of these cellar management systems. When adding vessels into the systems, users are able to generate barcodes or QR codes, which can then be printed and attached to barrels. These codes can then be scanned by a mobile phone's camera, eliminating the need for cellar teams to write barrel numbers down when performing barrel-oriented tasks, like sanitation or transfers.

Innovint's mobile app and its ability to help simplify barrel management and work orders made Groth Vineyards in Oakville switch to the system, according to assistant winemaker Collin Dillingham.

For all their benefits, these mobile apps still have some issues for winemakers, the major one being connectivity and service, while Noce said they lack some basic but useful features, like a dip calculator.

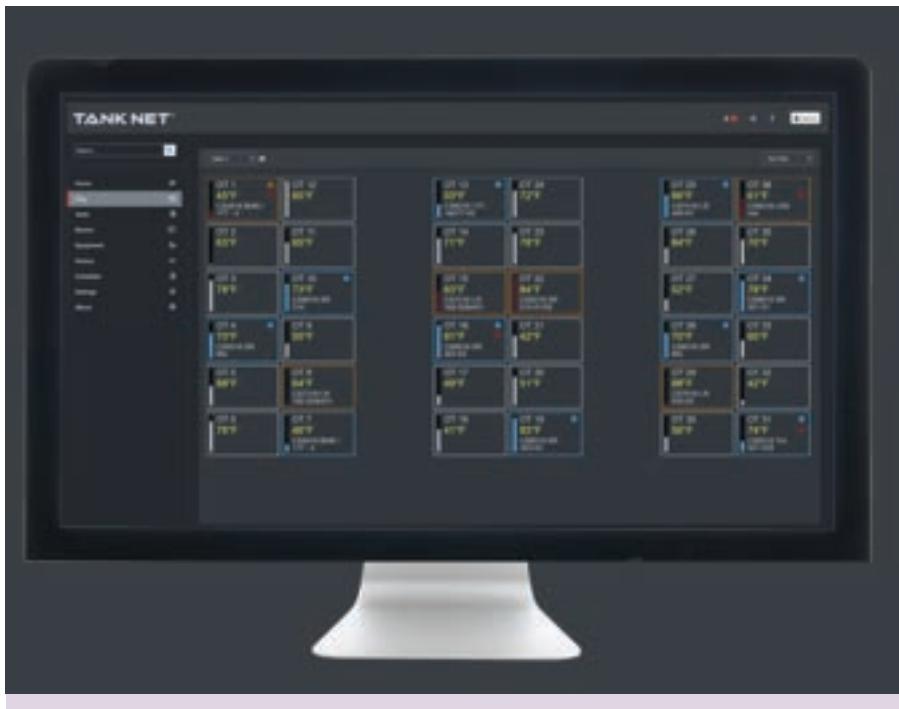
Flexibility for Custom Crush and Alternative Beverages

As distributor shakeups and weak sales persist through the first half of 2025, wineries are looking to expand production—and hopefully boost revenue—through alternative beverage production and custom crush. In regard to tracking and cellar management, this presents its own slew of challenges, from costing and inventory to the actual capabilities of the software.

"Businesses are becoming more complex," said Blended's Witte. "Wineries are producing alternative wine beverages—mead, cider, RTDs—expanding what they do or hosting custom crush."

According to Crafted's King, wineries are acquiring breweries to expand their sales potential: should a winery client express interest in making beer, King said it's a simple add-on; and once installed, users can switch from one module to another. Crafted can also manage and produce the necessary compliance associated with producing no- and low-alcohol wine and beer products.

Another software product that allows this is Ekos, which is based out of Charlotte, North Carolina. At present, Ekos is the system used by many



In this screenshot of a TankNet application includes a map of the cellar with individual tank temperatures and lot compositions.

popular craft beverage brands, like Juneshine canned cocktails and hard kombucha, Magnolia Brewing and Societe Brewing Company.

Ekos' system is also capable of managing distillation production, as is Vintegrate, which can also accommodate dealcoholization actions.

More often than brewing and distillation, small wineries may take on custom crush customers, offering their resources and skills to help smaller brands without the capital to achieve their winemaking goals.

In Napa, Susie Dineen is the manager for MicroCrush, which operates within Judd's Hill Winery as a custom crush facility; after many years of searching for a cellar management system that fit their needs, Dineen and the Judd's Hill team chose Blended for its easy-to-use interface and quick, friendly customer service team. In addition to managing the production of Judd's Hill wines, Blended allows the team to keep their wine separate from that of their 150-plus clients. With so much going on, Dineen said Blended's Witte worked one-on-one with them to create changes to the system that kept everything organized and compliant.

With custom crush programs, like the one in Vintrace, the system can create owner logins so that the custom crush client can also keep track of what's happening in the cellar, giving them full visibility with minimal editing capability. When performing certain actions, like topping, the system will alert if the user tries to record an action between wine belonging to two different owners. Other handy caution prompts prevent incorrect information being recorded, reducing trouble down the road. As for billing, wineries need only to pull a report on a client's wine history for the desired time period, and all actions and analysis will be displayed.

No matter how wineries choose to expand their production, software systems are following in stride, providing modules and tools to make record-keeping easier, all while remaining compliant. **WBM**

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