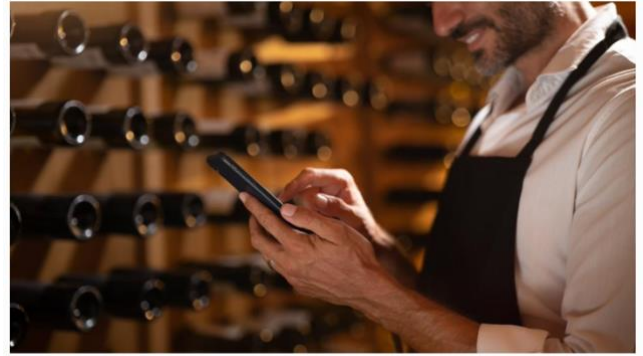


# Forbes

## The Biggest Technology Trends In Wine And Winemaking



The Biggest Technology Trends In Wine And Winemaking ADOBE STOCK

It is not often that I am able to combine two of my life's passions: future tech and wine. When we think about the wine business, the images that come to mind might be more of vineyards stretching across the French countryside than of robots and digital transformation. But the fact is that the industry has always been driven by science, technology and innovation. Today, things are no different. The latest wave of technology-driven change is focused on artificial intelligence (AI), the internet of things, augmented reality and blockchain.

In line with other industries, winemakers and sellers are facing challenges posed by climate change, as well as growing demand from consumers for traceability and accountability across their supply chains. Technologies such as these will help create new solutions as well as drive efficiencies and reduce waste. They are also leading to new ways for us as consumers to experience drinking wine. So, here's a rundown of how these trends are changing the way we make, sell and enjoy wine.

### Augmented Reality and Smart Packaging

Wine labels are set to become far more sophisticated. Information will be accessible via QR codes and even [AR](#), giving buyers insights into the produce they are buying as well as the production processes and conditions in which they were made. The Living Wine Labels app powers the "confessions" stories of those featured on bottles of [19 Crimes](#), with one bottle of Californian red even offering worldly advice from none other than Snoop Dogg. [Sparflex](#) has developed AR wine foil which launches animations and stories straight from the label, as has Californian wine producer [Rabble](#), with labels that come to life with dramatic animations using medieval-style illustrations. Some of this might seem

<https://www.forbes.com/sites/bernardmarr/2022/05/18/the-biggest-technology-trends-in-wine-and-winemaking/?sh=3aa61dce4e46>

gimmicky but marketers today firmly understand the value of building stronger connections between brands and users by developing technology-driven experiences like these.

## **Blockchain and NFTs**

Anyone with an eye on future trends in the wine and drinks industry will have spotted the impact that is already being made by blockchain and in particular, [NFT technology](#). It is the very fact that NFTs are “non-fungible” – meaning they are unique – that makes them valuable, as they can be linked to real-world items (like a bottle of wine) and used as a certificate of authenticity or provenance. They can be sold purely as collectible artworks inspired by great real-world wines – as is the case with [BitWine](#), a collection of 1,000 entirely digital wines designed by sommelier Lauren Vaile. After all, if we are all going to be living in the [metaverse](#), then why not have a cellar stocked with virtual wines to show off to your friends when they come to visit? If you prefer to invest your money in real wine, then the [WiV](#) platform might be more appealing. Its NFTs are all linked to bottles of actual wine that are securely stored, meaning that if the owner wants to drink them, they can swap the NFT for the bottle. On the other hand, if they simply want to sell it on for a profit, they can just pass the NFT to the new owner.

[Wine Block Chain](#) is a platform that promises to help establish trust and transparency across the industry by allowing every stage of the process to be recorded in secure, tamper-proof blockchain ledgers. Developers EZ Lab recently completed a trial, in partnership with Ernst & Young, in which a bottle was traced and certified from vineyard to bottle. All of the information can be verified through a smart tag that can be scanned by the customer with their smartphone, from when it was bottled to which pesticides and fertilizers were used during production.

## **AI and Automation**

[WineCab](#) has created an AI-driven wine wall complete with robotic sommelier. The huge installation – starting at around \$179,000 if you are interested – uses AI to choose the perfect wine to go with your meal before its robotic arm transports the bottle from the wall to its dispenser. The perfect toy for multimillionaire wine fans to add to their mansions.

For a slightly more affordable option, Preferabli (formerly known as [Wine Ring](#)) is a recommendation platform not just for wines but also for beers and spirits, that learns about user preferences and how to match the perfect drink to meals.

<https://www.forbes.com/sites/bernardmarr/2022/05/18/the-biggest-technology-trends-in-wine-and-winemaking/?sh=3aa61dce4e46>

Designed to be used both by merchants and consumers, it is available as a smartphone app or built into models of LG's Signature range of wine cellar.

Many uses have also been found for AI in the growing process – including the computer vision solutions provided by [Tule](#) that use video to monitor plants as they grow, and provide feedback telling growers when the water levels are adequate and what levels of “stress” the vines are under.

[Ted](#), the vineyard robot developed by Nao Technologies, helps to tend crops and clear away weeds, reducing the need for growers to put potentially harmful herbicides into the soil.

Green Brain is a project that harnesses the power of satellite imagery along with AI to monitor the health of crops across entire vineyards, giving growers insights into how well irrigation is working as well as the health of their crops, offering early warning when they might be at risk from disease or pests.

Other systems use automated drones rather than satellites, such as the one used by Spanish producer [Bodegas Ayuso](#), which combines drones with satellite imagery, ground sensors and local weather station data. All of the data is crunched by AI algorithms to provide insights that can be acted on in real-time.

The wine industry is using many interesting tech innovations, and there are many more to come. If you would like to stay on top of future trends, subscribe to [my newsletter](#), have a look at my books *Tech Trends in Practice* and *Business Trends in Practice*, and follow me on *Twitter*, *LinkedIn*, and *YouTube*.

Follow me on [Twitter](#) or [LinkedIn](#). Check out my [website](#) or some of my other work [here](#).