

# For Chinese wine connoisseurs wondering what's in their bottle, it's blockchain to the rescue

Shanghai start-up VeChain aims to help verify the whole supply chain with technology behind bitcoin

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It is a US\$2.8 billion industry, but jokes such as “the Chinese gulp down more ‘French’ wines than France makes” and “at least half of the Chateau Lafite-Rothschild consumed in China is fake” have undermined its credibility.

Now, VeChain, a Shanghai-based start-up, wants to arm the wine trade with blockchain and build trust in wines imported to the city, the mainland’s second-largest market for imported wine after China’s southern Guangdong province.

The company is testing the waters with French producer Pierre Ferraud and Fils, and has signed a deal to get its 2017 Beaujolais Nouveau red wine verified on its blockchain platform, which is linked to Shanghai Waigaoqiao Direct Imported Goods (DIG) on the retail front.

“The beauty of blockchain is that shoppers can see information about the whole life cycle of a bottle of wine from various sides, including vineyards, logistics and retailers,” said Fu Yu, a partner at VeChain. Accounting giant PwC and business assurance major DNV are among its investors.

For instance, by scanning a quick response (QR) bar code, shoppers in Shanghai can get hold of winery details, grape type, an 18-digit Chinese customs declaration number, the date the bottle left the stock house, when it

landed at a bonded warehouse in Shanghai, as well as when it landed at the DIG retail shops in the city.



For more premium wines, the company plans to embed a designated near field communications (NFC) chip near the wine stopper. Once the chip is broken, users can no longer read or write data onto its blockchain, alerting consumers about refills.

Blockchain is the distributed ledger technology behind bitcoin. It is most recognised for verifying and recording transactions using a network of computers rather than a centralised authority.

So far, 10,000 blockchain-enabled bottles have been shipped to DIG, and the volume is expected to rise tenfold in 2019.

On the distributor side, VeChain is helping DIG revamp its wine provenance tracking system, as the old one, on a test run since 2013, lacks key information such as the customs declaration number and, most importantly, the involvement of vineyards.

On the winery front, it is in talks with Fattoria Giro di Vento, a vineyard in central Italy, about using blockchain to gain a foothold in China, said Fu. He said the company was also pitching the idea to new world wineries in Australia and South America. The wineries were not immediately available for comment.



The origin of a wine is the most important piece of information for Chinese consumers, according to studies by market research company Mintel Group. And France is their unrivalled favourite country of origin, be it red, sparkling, white or rose wines, according to a Mintel survey with about 2,600 consumers of ages between 20 and 49, conducted in the second half of 2017.

Last year, mainland China imported US\$2.8 billion worth of wines, up 18 per cent from a year ago, according to customs data. In volume, the imports increased by 17 per cent to 746 million litres.

Major wineries are already adopting “old school” technology to prevent counterfeiting, such as laser etching of trademarks on bottles and bar codes that can identify the provenance of every bottle.

What VeChain and its partners are trying to do is carry out a verification of the whole supply chain.

Brian Zhang, an independent wine consultant with a decade’s worth of experience, said using new technologies at the very beginning of the production chain was a must, or “they are only as good as the weakest link in the chain”.



“For new vintages, if new techniques help to document the entire supply chain, they are more manageable and effective,” said Zhang, a former Christie’s wine specialist in Hong Kong.

“However, the fine wine market is different,” he said, stressing that for these wines, all after-market technologies are only as dependable as the wine specialist doing the initial authentication.

Provenance and authentication is no doubt among issues on top of the wine industry’s agenda.

Wine Australia, an Australian government authority, said a number of Australian companies were investigating various means of further ensuring authenticity in international markets, and that blockchain was an option being looked at.

And VeChain and its partners are not the only ones that see potential for blockchain in the wine sector. Auditing giant EY has teamed up with the Padua-based start-up EZ Lab to help document the quality and geographic origin of wines made in Italy by using the technology.

Warren Wang, an advisory partner at EY for Greater China, said blockchain was rising as a disruptive force to build a trust system as a traceable, tamper-resistant and decentralised technology.

“In China, trustworthiness remains a weak spot and blockchain is well positioned to tackle the concern,” said Wang.

The foreign trade and luxury sectors, including premium wines, are among industries that can benefit most from this technology, he said. “It’s still unfolding. In three to five years, we might see a killer application from the real economy.”