

Deloitte TECHTalks | EPISODE 22 | The Wineries of the Future

With Michael Juergens, Principal, Deloitte & Touche LLP, Leader of Deloitte Winery Solutions and Services Practice

Raquel Buscaino: Welcome to Deloitte TECHTalks. I'm your host, Raquel Buscaino and I lead Deloitte's Novel and Exponential Technologies team where we sense and make sense of emerging tech.

On today's episode, we're going to be taking a deep dive into the exciting world of wine. Wine has been around for thousands of years, but what happens when one of the world's oldest beverages meets the technologies of today?

I'm excited to be joined by Michael Juergens, a Principal at Deloitte and Touche LLP, and Leader of Deloitte's Winery Solutions and Services Practice to the pod to discuss just that, the tech innovations that are helping to drive the wine industry forward. By the time we're done, my hope is that when it comes to tech, we'll all see the glass a little half full. Michael, welcome to the podcast it's so great to have you.

Michael Juergens: Well, thanks for having me on.

Raquel Buscaino: Today's episode is all about the role of tech in wine production, but before we even dive into the tech part, maybe you can just share about wine production in general, and what are some of the key considerations for our listeners to keep in mind, as you and I dive deeper into tech later on.

Michael Juergens: Sure, it's interesting, you brought it up a little bit in your intro, which is, you know, we've been making wine for thousands and thousands of years. I mean. Heck! We were making wine, you know, literally eons before we had a written language. For years it was our medicine, it was how we purified our water, it was how we came together, so humanity has this kind of special relationship with wine. But when we start thinking about how wine's made, so at some point in time you got to grow grapes and then once the grapes are grown, then you have to ferment the grapes, clean it up and make it stable and clean the bacteria out of it, and so on, and so forth. But those are kind of the big pieces, right?

And so, what we see in the wine world is that there are many different business models, right? So there are some people who just grow grapes. There are some people who don't grow any grapes, they just make wine; they buy the grapes. Then there are companies who grow grapes and make wine and so, for purposes of this discussion today, and just to make the discussion manageable, I'm going to focus on the making of wine, not the growing of grapes, if that makes sense.

There are lots of things that you can do in a vineyard with tech, from using drones and AI to spot signs of disease and blight, to putting moisture-sensing devices into the soil, but I'm going to just settle that aside, and focus on what happens when I've got grapes, and I want to turn those delicious grapes into a delicious bottle or box of wine.

Raquel Buscaino: As someone who is relatively new on their understanding of wine, thank you for breaking that down so simply because it is helpful, yes. There's the growing of the grapes but we're going to focus on wine production and wine sales. So, everything once the grapes are handed off.

Michael Juergens: Yes.

Raquel Buscaino: Amazing. When I think of wineries, I think I have a bit of a romantic idea about them. It's a vineyard in France or Chile, or anywhere in the world, and I don't really think about AI, data analytics, digital transformation, but there is this element of innovation in the industry. So, what's the art of the possible when it comes to wine production or wine sales when it comes to tech?

Michael Juergens: There are different points of view on this. And I think maybe one thing to talk a little bit about are like business models. There are many companies that are trying to make a very consistent \$8 bottle of wine that they're going to sell to millions of cases of it to people. We want it to be clean, we want it to be consistent but we're not trying to make art, we're trying to make a product. And then you have the other side of the spectrum where this particular acre of land is very special because of where it sits in the world, and the history behind it, and the people that have been farming it, and this bottle of wine is very unique and special, and because of that, it's going to command a massive price premium. And we see that, too.

To your point I think, where we have seen historically people deploying tech solutions is on the larger scale type of wines where you are really concerned with the consistency and how you're going to make and distribute this wine.

Whereas for some of these really special wines. It's more like, well, we're going to see what nature gives us this year and try to make it as clean as humanly possible, and we're going to be non-interventionist. I don't know that I have a perspective that would say that one of those is right and one of those is wrong. I would say it probably offers different opportunities for technical enhancements.

Raquel Buscaino: That's a helpful framing on the different business models. To that second category, you just mentioned where it's a smaller scale, maybe a more premium wine experience, what types of innovations are happening, and how do those get marketed and distributed? Are NFTs (non-fungible tokens), or any other tech innovation like them being used in the wine sector for that smaller scale premium wine?

Michael Juergens: So a lot of these like small, high-end wineries, a lot of times, that wine is allocated far in advance. I mean I'm an end consumer and I'm going to get my 2 or 3 bottle allocation in the springtime, or I am a negociant in Bordeaux, and I'm going to get my allocation allotted to me for the year, and this is how many cases you're going to get.

And so, because of that some of the things that you may use to like drive sales kind of don't matter and I'll tell you a story: I was speaking with the owner of a large, very prestigious winery in Bordeaux. And I asked her, I said, "Hey, what global market is most important to you?" And she goes, "I don't care". And I go, "You don't know who's buying your wine?" She goes "No, I sell all my wine in advance to 6 people, 2 years in advance, what they do with it I could care less" right, which is a very different kind of mindset from like someone going "oh, I want to gather data on my end users, so I can use that data to help inform my marketing strategies.

You mentioned NFTs, one of the things that I think is cool about NFTs is the ability to share them, and I'll give you an example: Today, there's a thing in the wine space: If you drink a cool bottle of wine, you save the cork. But let's say you and I, share that bottle of wine, there's only one cork. We're not going to cut the cork in half right, but through NFTs I can take a digital cork and turn it into a tasting NFT that says "Raquel, you and I shared this bottle of wine, we both had the experience, so we both get the NFT" and then I can display it on my wall of NFTs of cool bottles of wine that I've enjoyed.

So that's an example. We certainly are seeing things where you have access to broader sets of experiences that historically, maybe you wouldn't have had access to like, you know, if you collect enough of these tasting tokens that you might be able to then go and have a dinner with the winemaker at the winery.

Raquel Buscaino: I really like the NFT example, because when you're dealing with premium wine, it's really about the experience. And so, the NFT example highlights how it can be used for an event, how it can be used for access, memorabilia, collectibles, you name it. But so, what you mentioned there, that's 1 side of the business model. What about that second business model, the \$7 wine, what are the tech innovations that are driving that market?

Michael Juergens: It's interesting because it's not just the product itself, it's where it's sold. If I, as a producer, particularly in the United States, if I can sell directly to the consumer, if I can sell that bottle of wine directly to you; I capture all of the margin. Whereas if I sell it to a distributor, and then the distributor sells it to the grocery store, and then the grocery store sells it to you, everyone's getting a little piece of the pot.

So I as a producer in a perfect world, I would want to sell as much as I humanly can directly to you. And having a well thought-out kind of app strategy allows me to do that more effectively. Another example, there's a company that's been successful making little -- you can scan the label, and then some interactive stuff goes on telling you the story about that particular bottle of wine.

Raquel Buscaino: You know, when you think about products, you know, can include wine, can be outside of wine in general that are typically at a lower price point for mass consumption, the personalization element is often what you forsake. But I think what you're clueing me into a little bit is there's a degree of personalization that can happen within the marketing process, so there's a level of personalization that's afforded through AI and other innovations that is allowing me as a user to interact with mass consumption material in a very micro consumption way.

Michael Juergens: Yes, and I think with that, we can also layer on some [demographic components](#) that become more interesting and I'll give you an example, you know, boomers tended to be pretty category and brand specific. And then you have sort of the Gen X folks who got a little more curious. Oh, they might try some beer and some wine. Then you go down to the Gen Z folks, and they're not category loyal or brand loyal. But these people are commanding a much, much larger share of the industry, and so I now have to speak to them in a way [that gets their attention](#). Part of that is the method, i.e. you know, digital- native, and part of it is the story. And I can use digital-native tools to help get that message into the hands of people who it will resonate with.

Raquel Buscaino: Just hearing what you said right there, there seems to be a generational demographic change where younger generations tend to operate differently in terms of how they think about wine than say older generations. And then you also mentioned a little bit with the generational preferences that there's more of an indexing on the story of wine and the meaning behind it over the taste. So, in light of the changes

you are seeing in the wine industry, what other tech innovations are you expecting, whether it's in wine production or wine sales?

Michael Juergens: So, I think one of the things that has gone on in the wine industry historically was an underinvestment in tech. And so it would be pretty commonplace if you were going to go invest some Capex dollars, you would try to buy another vineyard, plant some more vines, buy better barrels, build a new tasting room that sort of thing, and the back-office systems would have to be good enough, but you know, at the end of the day you can throw some grapes in a vat and make some wine without an ERP (Enterprise Resource Planning) system now, you know, that can occur.

And so, I think there are plenty of opportunities to modernize kind of across the board, and that that's everything from enterprise applications to even, in the wineries themselves, I want to have a tank network where I can control the temperatures of all my different tanks from a single tank console station. And I'm doing that in a way to manage my fermentation cycles extremely tightly. I think we're going to see, continued investment in tech solutions, both in the winery and in the back office. That's one. I think there are regulatory requirements that will become easier to navigate with the use of tech, and I will give you an example, the EU passed a law that says you have to have ingredients lists on all your wine. But you know, like the wine list could have a lot of ingredients. So, everyone's using QR codes because it's cheaper and faster and quicker, and it's easier to update. So, I think we'll see that. There's no question that we're seeing a lot more precision on, like, smart farming. I know we said we weren't going to talk about the vineyards, but I think there's massive opportunities to do things like be better users of water which is super important in places like California where water is, you know, a problem.

I think we have not even yet seen the rise of real personalized sales. And as a winery, if I can figure out how to go direct to customer, I'm going to triple my profitability and so I need to figure out a way of speaking to that consumer in a way that that person hears me without alienating my trading partners, who, you know, the grocery stores who are my customers who I'm selling to right? There will be people who figure out how to do this very effectively, whether it's through the use of influencers, whether it's through the use of loyalty programs, whether it's through the use of collecting NFTs, but I can guarantee that we're going to see more and more of this propping up over the next 5 years.

Raquel Buscaino: I'm excited by all of those features, and you know the personalization at scale. And I think what I also like about all the examples you listed out is that we're talking about tech modernization, but all of it still preserves the culture and the history and the respect for wine and an industry that's been around for thousands of years, when technology allows people to connect with products in a new way, such as the NFT example, or the personalized marketing, it's allowing me, as a user to connect with wine in a way that I might not have otherwise while still respecting whatever it is of the production side that you want.

Michael Juergens: Yeah. And like, if you buy into this narrative where I started, which is that wine has been an intrinsic part of the human experience for thousands and thousands of years, it's not a stretch to think that it will continue to be an intrinsic part of the human experience for the next 10,000 years. And so, how do we, as cultures, preserve what we need to but also modernize at the same time.

Raquel Buscaino: Michael, this has been such an awesome discussion. I feel like we've taken so many different topics here. We've talked about the differences in wine production, what we mean, the technology solutions, key insights to how the industry is changing, opportunities and challenges, we've really, we've covered quite a bit in our time together. Is there any final thoughts or key takeaways you want to leave the audience with?

Michael Juergens: The one thing I would say, and this is just for all you aspiring wine people out there. Wine can be intimidating sometimes, and it certainly does not have to be. And my one recommendation for all of you when you're out getting your wine, just take the time to buy one wine that you have no idea what it is. And if you could do this, you know, from time to time, you'll help to kind of really reinforce what your personal palate is, and then that will just make all of your wine experiences that much more powerful for you.

Raquel Buscaino: Amazing, Michael. Thank you so much for such a wonderful discussion.

And to all our tech savvy listeners out there. If you enjoyed this episode. Please share and subscribe, and if you'd like to learn more about wineries of the future, you can follow myself or Michael to stay up to date. Our socials are listed in the episode description. Thanks for tuning in, and I'll see you on our next episode. Until then. Stay savvy.

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