GG:

Let's be honest, realtors face an ever-changing industry with emerging tech, growing trends, and a booming market, it's vital to keep up. Join me, Gilbert Gonzalez, CEO for the San Antonio Board of Realtors. As I get real with experts on what realtors need to know in this industry. It's time to get real.

GG:

Hey there everyone and welcome to episode 32 of our Get Real podcast. Our guest today is Nathan Brennan. Nathan is Restb.ai's Chief Product Officer with 10 plus years of experience building and launching AI-based business-to-business products across the energy and real estate industries within both the US and Europe. Welcome, Nathan. Thank you for joining us.

NB:

Thanks, Gilbert.

GG:

And we were talking about it a second ago. You're actually coming to us from Barcelona, Spain. So when we talk about both continents, you mean it

NB:

<Laugh>? Yes, that's right.

GG:

Tell us a little bit about yourself, Nathan.

NB:

Well as you've mentioned I currently work at Restb as the Chief Product Officer. I'm currently based out of Barcelona, where Restb's headquartered. And if you can tell from my accent, I'm, I'm ultimately from the U.S. So, I grew up in Atlanta before making my way over here about five years ago. I started my career in ai, but more on the energy side doing price forecasting, but fell into real estate, which I've

been very happy with about five years ago as well. So taking twists and turns, but currently very deep into the MLS world and the real estate world, and trying to figure out how AI can help it.

GG:

So you mentioned earlier you did it for pricing for a different industry, and now you're doing it in real estate. So there are tons of people who are using AI within their various industries. How would you define ai? What is your definition of artificial intelligence?

NB:

I think that's, a great question because it seems like everyone's doing AI these days, so it's always a little bit hard, to understand exactly what that means. I think in simple terms, it means how you can train computers, to think and act like humans. But really it just you know, has to do with the different ways that you program computers to solve problems.

GG:

How we program computers to solve problems. Is it an algorithm? I mean what does a computer do to get AI or to become artificially intelligent?

NB:

Right. So within ai, there are different fields that you can look at. The one that we spend most of our time with at restb is computer vision. And that uses what's called a neural network. And a neural network is really designed to work a lot like your brain. So you have all these different nodes, or they're connected by neurons that all take in a lot of different information. Try to understand how that information relates to each other and ultimately give you an answer or an output to your problem. So if we look at you know, the computer version, which is dealing with imagery, let's take a photo. You train AI or you train a model over looking at all these, these photos you know, what's in the photos. All of that is basically taught like you would to a person about what's in there.

NB:

And then when the AI is given a new photo that it hasn't seen before, it tries to learn from what it's seen in the other photos to determine what that photo is of. So if the AI sees in that photo something that looks like a sink, then it might say, okay, well this could be a kitchen, or maybe it's a bathroom. Both of those have sinks, or what looks like sinks in a photo or but then once it also sees, okay, well it looks like there's something that's like a refrigerator these other things, all these are different clues that basically help the AI say, okay I think that ultimately this photo is of a kitchen, and you can apply that same concept to really almost anything that you as a human can discern from that photo to ultimately analyze imagery in a really scalable and quick and efficient way.

GG:

So it, right now I'm looking at a photo of you through Zoom, and so the photo is going to look at this photo, I'm sorry, a computer is going to look at this image and say, that's brick. There's also a clock behind him. How does it take the zeros and ones to get to that point? How does it see that?

NB:

I think it's important to, when you think about ai, it will tell you that the wall behind me is brick in this case, but AI doesn't really have any concept of what brick is or what anything is. So what it's really doing is saying that that thing that I see behind you, I've seen other things like it before that were called brick when I was trained. So it, it learns based on what it's told, so you have to provide it training data, which is ultimately just lots of photos that have been labeled or tagged based on you know, what a human has told it that something is. And then based on that, that's how it understands that the wall behind me is brick.

GG:

So the more times it sees what it see thinks is brick, the more times it, the more likely it's accurate to know it is brick.

NB:

Correct. And it only knows what you tell it. So imagine that all of our models are focused on real estate. So you might look at me and say, Hey you know, Nathan has brown hair. The ai, no matter how smart it is, if we haven't told or helped train it to understand what brown hair is, it will never understand what that is.

GG:

So here's a random question for you. How old is ai? Y you know, at what, what age is it if, if it's like a, a baby and we're teaching it, Hey, this is brick, or this is a word, so at some point, it's learned. Can you articulate the age or capacity of artificial intelligence, like how adult it can be or childlike?

NB:

I think you know, I feel like I'm going to quiz a little bit, but

GG:

<Laugh>, I'm sorry.

NB:

I think how old AI is, in general, is a question that I would have to Google. But with regards to our models, our oldest model would be our room-type model. So understanding what room each photo's of, and that model for us is seven years old. And one of the really cool things about AI is that over time it learns. So as it says, Hey, this is a kitchen, this is a bathroom. When it's given images that it gets incorrectly, it's able to retrain over those to learn and to improve. So in this case, for our room type model, it's probably on its 20-something version over time. And it continually improves as it's given new information and continually learns. Other models that we have may only be, you know six months old or you know, even younger, and they can still do a lot of cool things, but obviously they're going to be more likely to have different errors because they just haven't seen as many corner cases that really help it learn and develop you know, to get closer and closer to that human ability.

GG:

So working in real estate and artificial intelligence, you've kind of brought it up a little bit about what y'all do. Just in general, how can artificial intelligence help buyers and sellers make decisions more quickly?

NB:

So I think when you look at how this can help a lot of the processes that, an agent does today, or in this case, the buyer, the seller, the agent's working with, the idea is that there's a lot of things that you want to consider when looking to buy a home. So if you're a buyer, you may know what your budget is, where you want to live, and you may even know like, Hey, I want a super modern home. That's where I've always wanted to live. Well, what AI can do is say, I know what you want. Let's actually see does that home exist in the area that you want for your budget? How many of those particular homes are on the market right now? Is that typical, is there an oversupply for what you're looking for?

NB:

Is there an undersupply? And given all of this insight that can be made available instantly to that agent, it could then say, Hey, it's great that you want this, but the home you're looking for hasn't been sold in that area for the past two years. Perhaps it's better to look in this other area and maybe you want to retrofit it so that you can get that modern look. But getting those answers upfront to basically give clarity on, Hey, is this possible or not really takes out a lot of the waiting, or let's see if there's anything better over the next couple weeks that sometimes can exist when there's less information and that's clarity on what's available or what could be available on the market.

GG:

So the idea is to help personalize the home search experience for buyers.

NB:

Correct. So I think that that's one of the big advantages of AI is that it's very flexible, it's very adaptable. And so every buyer is going to have different interests. Every seller might have different interests as well. Are they looking to sell their home as quickly as possible, looking to get the maximum amount of money for their property? They probably want both of those, but the way it's weighted is going to be different for each seller AI can basically take those unique constraints that each buyer or seller may have, and given the particular market they're in, that's going to be different for different people in different parts of the country. And inform them how best to understand their particular environment at that particular point in time, which can help lead to more efficient outcomes for everyone.

GG:

So there are some articles out there that say AI can help with renovations. Does that fit into this same analysis?

NB:

Yes. So that's actually an area we're quite familiar with of saying, Hey you know that you wanna renovate a home, perhaps it's because you want that renovation for yourself and you wanna enjoy it. Or there are a lot of people who are looking to put their home on the market and they wanna say, Hey I know my home hasn't been updated as recently as maybe it should be to be listed. What is the biggest bang for my buck that I can get when I renovate my home? So in this case you know, it's great that you can look at Inman and it will tell you, Hey homes with X are going for more money, but once again, that's going to be different in San Antonio than it is going to be in Seattle. So AI is very good here at saying, Hey, we know that adding this particular deck to my home or renovating the bathrooms for my home is going to add X amount of money. Well, if I know how much those things cost, then I can do the quick

back-of-the-napkin calculation to determine what the most cost-effective renovation I can do for my home will be.

NB:

And the last thing I wanna add on that, that we found quite interesting is that even within, say San Antonio, that's a very market-specific decision. There are certain homes imagine that a home's maybe on the higher end for its particular neighborhood where the renovations that may, in general, be good for San Antonio may not be good for that home because it's already the nicest home in its neighborhood. So you can basically take a lot of these complex things in a price not only at a local level but at an individual property level to determine what that potential impact will be.

GG:

This seems very useful for the seller, right? Like, I'm going to sell a house in a couple of years, I need to know what I should probably put into it or what I should change to get the most return on my investment. But it also sounds like a useful tool for investors who would want to be able to plug it in and say, am I going to get a good return on this investment? Or if I buy this house, how much is it going to cost? Or is that me kind of speculating?

NB:

No, I think the more efficient the market is with regards to being able to understand what a price should be and what you know, it's ultimately going to cost to purchase or sell a home is, makes everything more efficient, even if it's just in reducing the days on market of all these properties. We actually work with a lot of investors on the buy side as well, who are currently spending a lot of manual effort reviewing different properties to determine what's the best property for their buy box. Some of those may be fixed and flips, others might be buy and holds, whatever it may be. And with these use cases, what we see is often they don't want the AI to say, Hey, this is the best property for you to buy. Here's the AVM value that gets spit out.

NB:

Go ahead and put your money down. But it's more of saying, all right, instead of looking at these 100 properties, which we know is going to take x amount of hours for you or your team to do, how about let's narrow it down to the 10 that look the most promising. And you still spend that same manual effort, but the effort that you spend is on the most likely properties to be purchased. And so you're being a lot more efficient, but still adding that final human touch to that decision-making process.

GG:

Okay, I'm going to come back to that human touch, but I do wanna transition a little bit because I think we're talking about how it helps the industry side how it's going to help agents and lenders or so is the computer going to be able to, I shouldn't say computer, well, I guess it is a computer, is artificial intelligence going to help with trends, you know white is the color of the year and white countertops is what you should go for in your kitchen. Like, is that a future benefit of artificial intelligence for us?

NB:

I think that certainly plays into what AI is really good at. And that's being able to take a lot of data that may be not, that wasn't used historically to give you things that are helpful to know. There are someone like Inman might say, Hey, white kitchens are, are in now. And once again, that may be true in general,

but that may not be true in San Antonio or wherever you may be. The challenge is that there's no data set that says, Hey, here's all the properties that have white kitchens in a given market, but there are a lot of photos of all these properties. So if you could in the same way as if you as a human could go walk in every home and really see, hey, these are the homes that are on the market with white kitchens and they're selling better than these other homes I've visited with darker kitchens or whatever it may be.

NB:

You could do that now or just take a ton of time, time that really isn't feasible to spend. But with ai, you can do that more or less instantly. And then say, Hey, actually 27% of the homes in this market that have been sold had white kitchens. We also know that 12 months ago that was 35%. So it seems that this is a downward trend with this particular component, in this case, white kitchens. So a lot of these things that haven't really been recorded, but that you can see through photos, and if you had enough time to look through, you could make these same determinations can now be done with AI in a very quick way that can then be leveraged by an agent as that expert of their market.

GG:

So what helps the computer determine that that tile on the floor that's made to look exactly like wood plank is actually tile?

NB:

This is a very common question that we get. And I also think something that's very important to understand is the AI is trained in the same way that a human would be trained looking at photos. So that means you can't touch it, you can't knock on it, you can't go look at the receipt from Home Depot about what was purchased. All you can do is say, Hey, to the best that I can see from this photo I'm looking at actual tile. Of course, in some cases you probably can look for different things that help indicate, well that tile doesn't really look as nice or as premium. But in other cases, particularly more recently, it seems like these imitations become better and better. It's harder to tell that I think then opens up the argument of, well, how important is it for that to actually be the material that I say it is?

NB:

You know, if I'm a buyer, if I'm looking at these photos, is am I going to be able to to say, Hey, I don't wanna live in that home because it's not actual hardwood, but it's a hardwood that looks very attractive. It's the exact type of hardwood I would want to buy if it was hardwood. I think that is a little bit more fluid and in some cases it probably does matter, but there's other cases where it doesn't, or it may not matter to a certain buyer. And you know, the AI here is, is really saying, Hey, this is what it looks like. You can cross reference that with things that you may have from the listing. But if you're looking for homes and say hey, I want a kitchen with stainless steel appliances and hardwood floors, it'll show you photos that represent that idea that you've described. And in a lot of cases that's good enough.

GG:

You mentioned a second ago that you think that reexamining the photos is what AI is really good at. What do you, what else do you think that AI should be taking advantage of to help in the real estate industry?

NB:

I think the personalization element that I mentioned earlier, I think every buyer's journey is different. And often they are kind of pushed down the same path of, Hey, tell me all the things that you want. I'll show you what's available. And if you've checked one of these binary filters and there's something that you know doesn't fit them, then you don't easily see it. But I think that most humans, myself in particular, I'm not very good at articulating what I want or, saying, Hey, what are the trade-offs of, all right, I really want a back deck, but it's not a must-have. But I only wanna look at properties like that because it's one of 25 different decisions I have to make about what I wanna look at.

NB:

So with ai, you can do the same thing. You can tell it exactly what you want, but it can also learn by your actions. So if it finds you lingering on properties that maybe have features or even lingering on photos, which maybe is getting back to something that I mean it can be relevant about anything, but if it sees you spending time on something that you haven't stated that you like it can also infer that that's something that you like. And then it can then alter the experience with regards to what notifications are sent to you, what properties are brought to your attention, or even what type of information is highlighted as things that might interest you in a way that is only possible with ai. There's no way to do that, you can't create a bunch of filters for that many different buyers cuz everyone's going to be so unique.

GG:

So it's learning from what I'm doing, it's learning from the photos I'm looking at.

NB:

Correct.

GG:

So if I keep finding a photo that has a view or it just seems that the house I look at, there's always a photo from the backyard and all you can see is this view of the city, cuz it's up on the hill, it's going to be able to tell that, hey, Gilbert really likes houses that have really nice views from the backyard, or you can see the sunset. That's the kind of thing that I may not articulate tell to my realtor, but that it's going to be able to pick up just because I keep going through those kinds of photos.

NB:

Exactly. And it can look at even how long you spend on a particular photo. So all of this is just extra information that can then be surfaced to the agent to help reveal what the buyer's actually thinking.

GG:

And so when I think of property valuations, and I know AI is being utilized a little bit more to help with CMAs and valuations. One of the questions I've always had is how does it know the unquantifiable elements of it? Like, oh, this is, it's really got a great view, or there's a green belt behind it. Those things that are harder for a computer to tell that it would increase value or be more desirable to people,

NB:

You know, there's always going to be gaps that are unknown that will explain, Hey, the computer thought the value was this, but in reality it's sold for this. We've worked with the clients and they've

said, oh, that's a hundred thousand dollar view on a particular property. It's really hard for AI to know, okay, that's what's the difference between a $50,000 view or a hundred thousand dollars view. That's great, but there's also a lot of things that it can tell in a standardized way that that can be utilized. And so every AVM right now currently has an error. If you look at more standardized markets like Phoenix, that error is going to be on average much lower because those homes are a lot more similar. You have better comparables you can get a better idea of what a home can actually sell for.

NB:

Whereas in areas that have older homes, more unique homes, that area is going to be upwards of 10%. So the idea with AI is not to solve every final thing that that exists. I mean, that's the ultimate goal, but there's certain things that you just aren't going to have that data for. The data's going to be inconsistent, but the thing with AI is, all right, what are the things that we can do that are current gaps? So specifically with valuations, the biggest gaps are the condition or the quality of the home. If I think about where I grew up in Atlanta the home that I grew up in was built over 30 years ago. The other homes in the neighborhood were built at a similar time. If I go back and drive through that neighborhood, I'll see a lot of homes that really haven't had anything done to them over that 30 year period.

NB:

And there'll be other homes that have been renovated within the past five years. Right now there's not a consistent data set that is able to explain what is a different level of work that's been done to either of those homes. And if there has been work done, is it a matter of, hey, I put in a new refrigerator, or hey, I put in a Viking refrigerator. Knowing that one detail can be a difference of $10,000. These are the types of things that are what we've seen, the bigger blind spots with current models that AI can solve completely solve, but provide much more granular insights that can help fill that gap and reduce the error for some of these valuations.

GG:

How is this going to help agents' lives become easier?

NB:

So I think that agents are really good about understanding their client understanding their market, being able to explain to them why it's something that may seem intuitive to their, their client is not actually the case. And what AI can do really well is basically take all these unique things about every single property, put them in the context of that particular market, and then provide that information to the agent to then figure out the best way to communicate or decipher to their client. You know, users are great, they can go on Zillow, they can look for all this information and they can say, Hey why didn't you show me this home? And then I know that agents get frustrated because they're like, well, yes, that home is great based on what you've said, but did you see these three pieces of information that are going to be deal breakers for you that you didn't see at first sight? I think agents are really powerful for that. You know, really making sure that mistakes aren't made with such a large purchase. And all the AI is doing in this case is basically accelerating the ability of the agents to get information or answers about our property that can then help them communicate and walk their client to the best decision that they need to make.

GG:

So the AI is going to help someone who has to deal with a pers a client like me who I, I ended up seeing like 50 homes before we finally pulled the trigger on one. And the idea is we're going to make it easier to where you can show him 10 homes that are more likely to fit exactly what he's looking for.

NB:

I think it helps in that case, and it also just helps in the case of saying what is the story that you, you need to tell your buyer that is looking for something. So an example I provided earlier, if you have a buyer who's looking for something that really just doesn't hit the market if you've been an agent in a market for 30 years, you may know that intuitively like, hey, you're just not going to find that. But it's always helpful to actually have data that supports that point, because I think people can be stubborn. They, they don't want to listen to someone they may not think, oh he doesn't know what he's talking about. Having that data and having that data readily available can save a ton of back and forth, can save time kind of going on a wild goose chase and can really just vet the agent, focus on what they're really good at, which is that communication piece without having to do all the data diving into a bunch of listings, looking at a bunch of photos, and trying to do the math to basically make that apparent to their client.

GG:

So using that as an example with me, it's Gilbert, this is the first time a house that is modern, mid-century modern has come on the market that's available in this neighborhood that you like. And the likelihood of it coming back on the market is this percentage. Like it's, it's giving agents that data to, to convince me on this purchase or give me the information on whether or not to buy at this point.

NB:

Correct. So it's all that, that data that can help resonate and can help support their argument. All of that is readily available. And even if the agent was going to determine all that, let's say it saves them the 24 hours to go get that answer because they have it at their fingertips.

GG:

So I think as we wrap up here, one of the questions that I would remiss for not asking is, is artificial intelligence going to take away some of the value of the realtor?

NB:

I think there's a lot of people who have that as a concern, but I think, you know what I see, and it's not just in real estate, it's in a lot of other industries, is it can really enhance agents and enhance their value because it makes, just as I mentioned, these things more accessible. It allows them to basically analyze more things more quickly and then get that information much, much more quickly. So I think for a lot of people who are in the industry, it kind of helps give them a boost to how much expertise they can have in the market. But even the people who have been in the market for 20, 30 years it's simply something that allows them to do that analysis more quickly and to also give that those years of expertise for how things have changed in a way that is still very, very valuable. So I think for the people who embrace it as something that can enhance their expertise, it can be very valuable. But I think for the people who ignore it, it is going to be a challenge for them to compete.

GG:

So it's better to learn to use the tool rather than to avoid the tool.

NB:

Correct. The tools I think are coming whether you're looking for them or not and so it's very good to understand how it can help you enhance what you're doing.

GG:

So Nathan, can you tell us a little bit about the company restb.ai and what tools y'all provide?

NB:

Of course. So the company restb.ai is focused on computer vision and AI and how that can help reveal insights about properties. I think our larger vision is saying, Hey we'd love to have all the time in the world to go look at the photos of every property in a given market. Unfortunately, we don't have time to do much less time-intensive things than that. So what happens when we are able to build an AI that can determine all these things in an instant, and the insights that we get from that, which a lot of those are things that we've touched on this call, are what we are looking to provide users and to provide those capabilities to improve what they're able to do. If we look at the MLS that is everything from, hey, helping make sure that all these listings are compliant for whatever the guidelines of an MLS are helping users be able to upload listings much more quickly, I imagine that rather than having to go check all the different check boxes for the components of your home, once you upload the photos, you simply have to go edit and review and say, yes, the listing that's now been prepopulated with all this information is good to go.

NB:

I can click send and it's uploaded. Those things can save a lot of time. And then on the search side, a big thing that we promote is this visual experience that sometimes is not as easy to use as it could be. If you think about social media, if you think about e-commerce, all those experiences are incredibly visual and you're able to find what you're looking for even when you don't know that you're looking for it yet with real estate, you start with this process where you use all these binary filters, it shows you what's left, and then if you wanna look at the photos and you have to go click through 20, 30, 50 photos to see what you want. A simple thing that we can do is saying, Hey you know, I really loved cooking.

NB:

You know, I started doing that during COVID my next home. I want in this much bigger kitchen that I can appreciate. Simply being able to search all of the search results based on their kitchen photo rather than the front of that home can save them a lot of time. And based on actually what we've seen, increase the amount of listings that that person visits. On the other hand, you can also just let a user upload their own photo. What is your dream house look like? Uploading that photo? You can then search the entire MLS and return all the listings that are similar to what that photo looks like. These are things that are very different than the way things have been done before, but incredibly natural and easy to use once they're offered to users.

GG:

Nathan, I want to thank you for taking the time to speak with us a little bit about artificial intelligence and how it's going to be utilized in the real estate industry. I do appreciate it and we look forward to learning more about this product moving forward.

NB:

Thank you, Gilbert. It was a pleasure being here.

GG:

Thanks for listening to Get Real. Be sure to subscribe for future episodes and share us with your friends on Facebook, Instagram, and Twitter. More information on this episode can be found at "sabor.com/getreal". Until next time.