

Interview with Dhaval Bhatt, CEO of ResonateAI (March 13, 2017):

dhaval: so what resonate is - it is **emotional intelligence as a service platform**, thats what we are trying to build. and we want it to be part of written and verbal communications for every marketing/sales message that goes out.

derek: we thought it was maybe targeted to financial but maybe it targets to more industries?

dhaval: we have focussed on financial industry... we have used wall street journal's data set to build out our model and we are going to continue to expand our dataset to improve our recommendations but **eventually over the course of 6-7 years we want to have a specific model for and support every vertical and every industry.**

derek: thats awesome

dhaval: yeah. so, let me give you a little overview. i dont know if emotional intelligence as a service is contextualizing the product in the right sense. so what we want to do, is **create a way for marketers to have a little assistance for making sure that they can be as creative as they want and have this little tool/ assistant can catch their back if they are going off the road** or anything. its a product that supports the marketer to improve their creativity, and help to to adjust their tone and their sentiment.

aarti: so how do they do it now - what do they use - marketers - is it all manual or are there products out there that help...

dhaval: so right now, there isnt a product that is out there. it is very subjective. lets say you are going to write a blog post about how awesome the UX program is, you would think about - (this is a classic way of writing) - you start off with having a lot of experiences - you did this and then this.. and then like you said, derek, you have an experience with working in a startup so you would relate to that and then you would talk about that experience and thats how you would do it. so it is very subjective right now. all copywriters have a lot of experiences. **all great copyrighters who really do a great job at this, have years and years of experience of observing human behavior, and then reverse engineering their content around that behavior and around those experiences**, so thats what it is right now. it is very subjective. so there is no way for young and inexperienced marketers to be able to write something that they feel confident about unless they use some kind of senior support person to review it or some kind of a product which is how we hope to be.

derek: so you think it is like empowering more junior marketing people?

dhaval: yeah **our goal is that marketing leaders can have some kind of insurance that any touchpoint that goes out of their brand is going through this product so it is not off, it is not misaligned with what they want to represent and the kind of emotions that they want to communicate.**

laura: so maybe it can serve as a training tool

dhaval: yeah, it could be that too...

derek: it could be so many things. it could be applicable to everything. we were talking about one of your podcasts - kind of, you can say something but it could be interpreted as something completely different, depending on who is listening to it. so it doesnt matter what we are actually saying, but how we say it, that matters. when are you planning to launch?

dhaval: we have a beta version and we are working with about 6 customers right now and we are hoping to be able to launch an actual beta version at the end of may.

derek: and is that going to be marketed to the financial industry?

dhaval: yeah

derek: are you able to tell us which of those 6 beta testing companies are?

dhaval: yeah we are working with provisors - its a company that has a lot of different financial companies that work for them, so we are partnering through them to pick and work with companies. it is very early stage so i cannot necessarily disclose anything yet. let me go back to them and see...

derek: yeah no worries, anything that you want to tell us, you know - tell us.

dhaval: let me follow up with you on that, let me take some notes as well. will get you introductions to customers as well...

derek: what gave you the inspiration for this product and the company?

dhaval: thats a good question. being an engineer i started out in the aerospace and defence industry and it is a very dry industry to say the least. you work with military people and people who are very concise and very direct. and my communication style was shaped by those early years of experience. so when i got tired of that industry and i transitioned to do something more dynamic in the e-commerce enterprenerial world, i experienced a lot of friction in the way i was communicating with my team and the rest of the world. so thats when i was like wow **there is so much more formibable learning about communicating with resonance** so thats when it initially started, and then i really took the whole journey of understanding marketing and communications and sales and influence and all that. and few years later when i started the data science program and we learnt about natural language processing and machine learning and intelligence and textual insights, i was like wow there is something we can do around this so it came back, it circled back...

derek: thats a great story

aarti: actually i used to be a support engineer and its true like you know. its again dry - its technical things you are telling them but it matters so much how you are saying certain things, so if this were there, i know that the quality of communication with the clients who dont know you...

dhaval: thats right aarti, i was talking to a company during the google next conference. there was a company there and they do QA. and they only work with, all their engineers are on the autism spectrum. what they want is a private product on their slack channels on their email channels to adjust the tones when people communicate with each other. it can be an internal communication tool as well actually.

laura: thats what i was saying actually, that could be really valuable...

derek: its amazing... so this is going to be a huge huge product. like life-changing for communication in general. is that your expectation? like is this going to be a multi-billion dollar company in the future?

dhaval: it is, absolutely. yeah. and going beyond professional i **also want to be going to the consumer world down the line to have some kind of physical product that takes data from your biological signals and helps you understand how the person in the room is actually feeling right now and helps you adjust your communication.** i'm pretty sure it helps inept people.

derek: yeah. they exist.

laura: so it is not just about text analysis but also about body signals...

derek: ok so the first vertical that you want to focus on is the financial industry. do you want us to be thinking about scalability to other industries when we are thinking about the user experience or should we just focus on the financial industry for this project?

dhaval: for the next year, we are 100% focussed on financial. so lets just stay with that.

derek: laura do you want to ask some of your technical questions?

laura: yeah so i have a tiny bit of background doing some nlp-adjacent type of thing. so one thing i am really curious about is how you came to the classification framework?

dhaval: yeah so let me work you through the analytics model. the reason it says cognitiv is thats the underlying mechanism. you will not see it anywhere in the branding. the product is what we are building the brand around. so the first brand is going to be resonate its gonna have multiple verticals. then we are also going to have something for lawyers and for doctors and patients and for accelerated learning. thats another passion of mine, to accelerate learning using resonance. so thats why its cognitiv. the way it works is that right now we use the watsons API as soon as we get the text we use that to process it. then we have built a custom model where we took all the youtube videos and popular blog posts and we asked a person to manually label these - saying - do you think these sentence represent trust? so we have like 100 samples representing trust (as an arbitrary example of a number). then we have 100 samples for confidence. and 100 samples for anticipation. and so on. so thats our basic labeled data set and then we also have bluemix which also has a bigger data set.

derek: yeah we read a little bit about how its like that but on a much bigger level like around 200,000 sentences and 1300 sample set of that...

dhaval: yeah i'm glad you read about it... so we are using watson and we process it through there but they dont give us what we need so we also have our own custom data set and then we use statistical models to calculate the scores. so there are 3 basic models. one is the recommendation piece. right now it is purely word recommendation. in about 3-6 months we want it to expand to sentence level, then onto the paragraph level and then even the document level - like restructuring of the plot and the sequence of the information. so if you start off with too much detail, we recommend you restructure that to have the summary before. i've done it hundreds of times.

derek: i need it...

dhaval: so thats the recommendation piece - we are using a separate model and we are using word2vec, which is a data set of all the words and you can plug into that and it gives you all the surrounding words in the context. for example the word good always appears the in context of the word bad. brown often has a surrounding context of the word fox, because of the quick brown fox. so we take all the words in the same vector space / context and we plug it into our recommendation. but before we put it in there we make sure that it is not recommending something opposite. for instance, if you have good then it should not recommend bad though it is in the same context. usually we pick something that is in the same magnitude. so emotional triggers - 6 triggers defined, or too many words, word embedding model - word2vec... this is what we get. we break it up using our custom model for confidence, joy, trust - we get this from ibm and boom boom boom we get a score and we present that in a bar chart format. this is the classification model that you were referring to. so this is what we get from ibm and our custom model if it is. then we the logistic regression model to say - yeah - this is.. trust - so you put trust on this. and then we scale it up and down based on the magnitudes that we get from watson. sorry if i am having to run through it but was that too much detail?

laura: no actually that was great.

derek: can you talk about how you use the data from ibm and how you combine it with your data to get the output?

dhaval: yeah sure. so ibm has about 200 or so emotions that it gives us output on. but not all of them have the value or magnitude that matter. some of them are nil or have very low value. so we dont care about those. we take the highest values that are meaningful and we feed the values - it is between 0 and 1, and we take the highest values and feed it to our model. we take all the positive ones because we dont care about the negative ones. we are thinking about that and trying to figure it out. because sometimes negative can be resonating as well. sometimes you can have levity in your content. its all positive but if it doesnt have gravity its very ungrounded it will appear very...

derek: too fluffy, overly optimistic? annoyingly positive?

dhaval: hah yeah. some of them are annoyingly positive right now. we are working on making it more grounded.

laura: i was just wondering how you chose the classifiers themselves. because i went through the process of having to kind of nail those out and it was really tough so i was wondering about these.

dhaval: yeah thats a great question. so there is this really popular book called influence by robert cialdini, who is a social psychologist. in his framework, he describes triggers to influence people. our classifiers are based on that.

derek: how does it compare to dale carnegie? i was trying to live by the dale carnegie method because i was new to sales and everyone would laugh at me. it didnt work, but...

dhaval: it is more scientific. you would love this book, derek. the other book that he came out with is called "pre-suation" which is about what one would do before trying to persuade someone.

laura: what struck me is that what users would like to know is what does it mean this "joy interval" so it is good to know that you have this research.

dhaval: there is also a book called launch by jeff walker, which helped many companies launch.

laura: and did you u have some kind of classification scheme for the manual trainers?

dhaval: no, we relied on their subjective intelligence at this point, but we want to have multiple layers now to make sure that if one person thinks the content is trustworthy, some other person might think differently. we also have automated processes now using mechanical turks, so we will have multiple layers to it now.

aarti: so, the way we like to organize or classify is who what when where and why. and the who right now are 4 users - the financial marketers, financial thought leaders, audiences which are going to be consuming the content and lets introduce the resonator which is a person who is going to do this somehow. so what are each of these users trying to achieve and how do they do it now. so the junior financial marketer. what is he really trying to achieve and how does he do it now?

dhaval: **so the financial marketer - what they want is more clickthorughs, more conversion rates, they want more ROI and they want to be able to say it about their advertisement/ email/ blog or social media campaign. their primary role is to make sure that the execution happens in a way that they can get a promotion.** thats what they want - so tell their boss, i did this and now i want a promotion.

aarti: so now they just do this manually.

dhaval: yes so now there is now way for them to measure or improve it with a tool now. they try to do it manually and they se eif it works and if it doesnt work, they will adjust their approach but there is no scientific approach to start off with a baseline.

aarti: what types of content do they rely on?

dhaval: one on one emails, being able to engage the content, mass emails, blog posts like about block chains, social media campaigns, white papers, and video / tv scripts.

aarti: so the ability of the resonator here is to be able to take any content that is going out there and be able to assist...

derek: like even a headline on a webpage?

dhaval: yeah. so we just switched form doing a content level to a sentence level so even a single line we can do an analysis on that and provide recommendations.

aarti: financial thought leaders. so - like - block chains is a good example. is there sometime more special about the content for a thought leader that a resonator might help with?

dhaval: **1. any product launch email campaigns. like when a new product is launched... they have to win that one.** as opposed to like a general monthly newsletter or some random blog post, which is not as important.

aarti: in financial products is there an example you realize where you wish the resonator was there in that moment?

dhaval: yeah, like the wealthfront new product page.

aarti: yeah i use wealthfront actually, and when i read about your work, i was beginning to question if wealthfront has the right tone for me...

dhaval: i'll give you an example of a post they had. they are launching a blgo post on how their selling plans give everyone an executive treatment. i dont know what that is. they talk about diversifying your holdings. so this is their landing page and they announched this via a blog post. now this is their way of communicating to the world that they have a new product. at this point they would want to see how much they are aligned with the tone of the audience. for instance how much confidence did you expect in order to do this or do you have a level of cynicism that you expect that they will communicate with some gravity not just all positive? you are more likely to buy if it is grounding. at this point they can run these sentences but this is very creative effort. so analyzing at the headline level, is not the best use of the product because this is all done by really creative people.

derek: yeah we were discussion how people only scan headlines and sub headlines and if at this level senior people do it, then that makes sense.

dhaval: yeah derek, given your background in sales...

derek: i was not really in sales, i was a fashion designer trying to sell my own brand.

dhaval: i have some background in sales and email marketing and subject lines are the most important thing. i get an email called "sticker?" from this guy at hustle, and i'm likely to open it. same thing with headlines. so what i think is happening at this time is that a lot of people are putting a lot of creative energy in crafting these headlines. i'm not going to be arrogant to say i can come up with better headlines that what you can think of but our product can obviously analyze their subject lines no doubt about that.

aarti: i'm going to switch our minds to thinking like an audience. so what is the audience trying to achieve? what do you want the audience to have?

dhaval: **what i want to get the end customer or end user to get from it is.. to read it with engagement and not feel offended not feel like they are being sold to without keeping pace with them. i want them to have an experience to receiving an awesome story.**

derek: storytelling

dhaval: we all know the experience of listening to a great story. i want the end user to have that feeling when reading the piece by resonate.

aarti: when will a financial marketer encounter resonate? eg. if you are a developer, you have an IDE which gives you certain tools

dhaval: i'll give you a content of how things are now and then i'll give you a sense of how i think resonate will fit into that context. marketer works with copywriter to come up with some ideas. copywriter goes and writes them up or they are written by the marketer if he is wearing multiple hats. then if it is a bigger company, this gets reviewed by the legal team then it comes back to the marketer who hands it off to the development team or if the marketer is wearing multiple hats he would compose the email or post the blog post himself. thats the cycle. right now, in step 2, before the product goes to legal i see the product fitting in or when the copywriter writes it up and sends it to the developer or the legal team, they run it through resonate.

aarti: which is why i think you mentioned the chrome plugin as a way to achieve this. so, to clarify - the audience itself is not going to see resonate.

dhaval: the audience is just experiencing the story.

aarti: now just the underlying why, for now the way we have understood it... resonate - it is augmented intelligence which is helping marketers connect to audiences with engaging content. so, why does the planet need resonate?

dhaval: i have a team member whose title is chief story teller. everybody needs an experience of being told a great story when they read content. when they go through that emotional journey. and content today lacks that. it is very factual and it has the wrong sequence of emotions it has the wrongs triggers and feels boring and monetized and fake.

aarti: are there more examples like grammarly? it seems to have a good ui and good ux. other such products?

dhaval: text.io, crystal knows, responsible by boomerang, grammarly (describes each)

aarti: whats ur vision, ur initial desire? what do you think we can do for you?

derek: like lets talk about the chrome plugin.. what do u like and dont like about grammarly? we know you want us to be involved in the plugin development and the word recommendation?

aarti: we are trying to get into your head an envision resonate with you

dhaval: i dont expect to fix anything, i hope to start a conversation. i want to know what to address when i work with or hire a UX designer or a graphic interaction designer. i want to be able to learn the grammar so i can resonate with them and work with them for what needs to be done, thats the least i expect. i want you to tell me what i need to tell them when i work with them. i want to learn the communication.

laura: sounds like you are looking for actionable insights, as a starting point.

dhaval: what i dont like about grammarly is that it requires a popup, but maybe thats the only way to do it. this product has a lot of potential, but it all comes down to whether or not users like using it and enjoy using it.

derek: so we have to like infuse the delight into it.

dhaval: right, and it doesnt have to feel like work to them.

dhaval: one thing i forgot to mention, is that **this is a very feminine product.**

derek: did you say feminine? i was wondering about the colors being like a salmon color; and this is being targeted to predominantly male financial marketing guys, but it makes sense now that u say it. so this makes sense, it is maybe marketed to women?

dhaval: no, it will be marketed to the financial industry which is dominantly male, but the product itself is feminine.

aarti: so the resonator is a woman.

laura: oh because of the perception of women maybe having more emotional intelligence.

dhaval: yeah **women have better emotional intelligence and make better leaders and for those reasons we want it to represent that and thats why we picked those colors as well.**

aarti: its amazing that you said that.

derek: so, are you looking at visual design for that?

dhaval: you know i have no expectations for having visual design. if i can get that, great. but i want to nail down the user experience, and **the core thing we absolutely want is for the product to be delightful and fun. its almost like you are flirting with somebody and a kind of enjoyment you get while having that, in a non-threatening manner.** can u think of products that have that feeling? u know when it happens.

derek: like, mailchimp or slack. ok so its a woman. whats her personality. if she were a celebrity who would she be?

dhaval: have you seen the movie - her?

derek: is that scarlett johanssen? i like that, i'd want scarlett johansen to give me advice on communication, its obviously working for her.

dhaval: haha yeah, **scarlett johanssen.**