



Podcast Episode #36 – Is your immersive content searchable? - Mark Milstein of Microstocksolutions, USA

RAW TRANSCRIPT OF INTERVIEW

Balint: I'm excited to have Mark Milstein here with me. Welcome, Mark, to the podcast.

Mark: Thank you, Balint. It's great to be with you.

Balint: Mark, you're very much into immersive media, so, Virtual Reality or VR, 360 degree video/photo, Augmented Reality or AR. Such topics, all of these topics, are actually new on this podcast. One of my previous guests referred to this field, so virtual reality, one of these fields, and he said it's a field, virtual reality, that is not a reality yet. What do you think about VR? Where does it stand now in terms of maturity?

Mark: Right. Well, like your previous guest has stated it is very much at the baby stage. It's almost literally right out of being an embryo. It is now making its way to the consumer market. It is a buzzword. There is much investment being made at this moment into hardware and the software that controls that hardware. And there's a lot of hype being generated around its uses and potential solutions for every profession on the planet who engages with this new media and at the same time consumers are being now slowly bombarded with new cameras and headsets at lower prices. It's a gold rush.

Balint: So, you are very much into it. And how do you see the main problems of this industry? You highlighted some of the elements that are quite in the forefront, in the headlines, but what do you see? Because you mentioned, for example, hardware that there's a lot of investment going into it and there are many manufacturers coming out with headset and also not only for viewing but also for capturing, for recording. And where do you see the biggest problems?

Mark: Well, there is an overly large amount of effort being made at this moment to make headsets smaller, to make cameras more powerful and to get corporations and users to now adapt immersive media in their toolkit of media types for, again, for commercials, for educational purposes, for any known use of both 360 virtual reality or AR. VR has always or has been traditionally the realm of gamers. It is now being expanded to a greater audience.



Augmented Reality is at this moment being greatly anticipated by consumer oriented companies, mostly retailers, supermarkets, clothing manufacturers who are paying a huge amount of attention to this new media and hoping that people offer them another means, a much more successful means to engage customers with 360 photography, 360 video, being touted and certainly anticipated to both add to the ways that consumers can photograph their families, friends and that news agencies can capture news events, and that movie makers and television producers can create media that will, again, continue to engage customers and consumers in a way that will generate higher revenue.

Balint: What about the contents that are actually recorded? So, where do you see there some issues? Because you have a certain product with which you're trying to solve certain issues. Can you expand on this topic as well?

Mark: Right. So, we have as I said an overly large amount of effort and focus being placed on the development of both software and hardware but a very small amount of effort being placed into what to ultimately do with that content, what has been generated. In fact, at this stage right now none of the largest stock media companies, Getty, Shutterstock, presently offer a means to purchase already created ready-to-roll-out 360 or virtual reality content. And in order for them to do so, it is going to take a vast sum of money and a huge amount of effort.

There are a number of barriers in their way. One is related to a passion of mine, which is metadata. Traditional keywording for photography and/or for standard digital video is never going to happen for 360 or virtual reality content. It just doesn't work. It's the equivalent of trying to put a tyre on a horse. It's not going to make the horse run faster or run smoother.

Balint: So, this is what you're working on. That's really good. I would love to return back to this topic. I would like to at the same time right now step back a little bit because just to give a bit of more chronological order to the things that have unfolded for you in your entrepreneurial career. I was wondering what were some of the previous steps that you had? So, even now your hands are in several companies, Digital Content Solutions, Microstockolutions, Northfoto. And how did that happen? So, what were some of your prior activities and also what were the actual steps of founding each of these companies?

Balint: Right. So, I began my career at a university in Washington D.C. as a journalist. I worked in Washington as a congressional correspondent and then I worked at the White House, in the State Department, for a very short period of time until I found my calling, I thought, at that time and I went off to become a correspondent, and then subsequently a photographer for Time Magazine, Newsweek as well as any one of a



number of other publications. And during the 1990s, covered 20 plus conflicts and natural disasters all over the world. And did that for, wow, almost 12 years.

And at the tail end of the 1990s, right just at the cusp of the 21st century, I lucked out, I was in Budapest, Hungary, and a friend of mine who was a correspondent for BusinessWeek magazine had invited me to an event called First Tuesday. And First Tuesday was a speed-dating event, which matched entrepreneurs with venture and angel investors, venture capitals and angel investors. And I was sitting at the bar, milking a beer and somebody asked me what was my idea, and not wanting to act stupid I said online photo agency.

And where that even came from I don't know because at that time in 1999, early 2000 there was only one internet based photo agency and that was Getty Images and Corbis, I'm sorry, Corbis which was Microsoft's no longer in existence venture in stock media. And I said this in Budapest, Hungary, in a place where there was hardly any internet and any media company that wanted to buy photography that needed to do so through the state meaning through the state's media agency. And this gentleman said, "Hey, that sounds like a really great idea. Do you have a business plan?" I said, "Yes," which I did not.

And anyway, and after a number of months of back and forth, back and forth I finally provided them with a business plan and within a short period of time I had a number of angel investors, including Esther Dyson the famed Internet pioneer as well as the founder of LogMeIn, the VPN network who had bankrolled my idea for Eastern Europe's first Internet based photo agency to a considerable sum and we raised money very, very quickly from many other investors. And off we went. And shortly after that founding, I took some of my money and my knowledge and went on to found another company called Northfoto, which is a competitive news agency celebrity and news agency based out of Budapest, Hungary as well which serves newspaper and web and outdoor advertising clients in Southeastern Europe.

And around 2008 or 2009, I got a phone call from a consultant in Germany who had gotten my name from a forum that I believe I had commented on an article and asking me on behalf of a client that he was representing whether or not I could help advise them on setting up an office in Romania. And the reason for that is because Northfoto, my second news agency, photo agency had an office in Romania, and at the end of this whole conversation we ended up agreeing to host a number of editors on behalf of this German photo agency, a Microstock agency, and it was via that experience that I began to learn about outsourcing. I began to get an education in stock media as well as in managing large remote staffs as I was now shuttling back and forth between Budapest and Bucharest and then to New York.



And over a period of years began to grow our client base and ultimately had to cleave off separate that venture from Northfoto and we called it Microstockolutions. And Microstockolutions is the leading provider of outsourced digital asset management and human-powered digital asset management solutions to the visual media agent industry.

So, if you are the likes of Getty or Shutterstock, or you're the Smithsonian Channel or your Discovery Channel or your GoPro, or you are Uber and you have large libraries of visual media and you need to have that managed whether it means video post-production, or it means photography compliance, or it means legal compliance on visual media, or it means just straight editing, you're more than likely working with us.

And it was out of that experience that I found Digital Content Solutions, which is another asset management company, which aims itself at the Fortune 500. And in recent terms or recent times, as a geek and a lover of visual media and an avid photographer and videographer, I began to fall in love with 360 content. A number of our clients were already sort of dabbling in it and had asked us for some consultation on the subject and in order to sort of beef up our knowledge, we began to buy cameras and play around with them in the office.

And then, one day owing to our nearly a decade long experience in metadata application on multiple types of media across multiple fronts, we started to realize that adding metadata to virtual content, to 360 content was not the same as adding that to traditional photography and/or to traditional standard video. And I came up with VRmeta, which is a company or is a product I should say, it's a toolkit but partially AI-powered, partially human powered which is the first means of applying time and location based metadata to virtual content, immersive content as well. And so, without this means, as I always like to say, immersive content will forever remain hidden in your server.

Balint: Very interesting, for sure. Thanks for the overview on how these companies came out and flourished, and also emphasizing the differences or describing the differences between them, how they differ from one another. Fascinating.

Mark: Thank you.

Balint: During this interview, Mark, what question do you wish somebody like me asked from you in VR or in immersive media related to this topic? Is there anything?

Mark: Right. Wow. Well, I guess I think that certainly from a prejudicial point of view and somebody who ultimately would love to see this VRmeta tool could succeed, the first question that comes to my mind every single morning and that I would hope that everybody would ask me is how are we ever going to find all of this content that



you're now offering us to create. You're pushing these cameras into our faces, we're falling in love with the notion of 360, we're falling in love with the technology. We're going out and we're actively creating that content but once created, what do we do with it?

At this stage there are too few solutions to answer those questions. We hope at Microstock solutions to ease all of that and to make that question go away. It is much of the way as we possibly can with the release hopefully before October of the iOS and Android based VRmeta app. The app will be a free giveaway and will allow anybody to create a fully tagged searchable future proofed content off of a tablet or of a telephone. So in other words, they'll make their photography, they'll make their video using their Samsung Gear, or their Ricoh Theta, or their Nikon, or their Kodak or whatever manufacturer 360 camera that they might actually have. They'll create their content, they'll then run it through the VRmeta tool kit, they will tag that content and they will then be able to actually find it. And those become indexable and universally searchable and that will mean that it will be future proofed and actually, at a level of value to it that could previously never have been made.

Balint: Exciting times ahead for sure for your company, for your initiative. October is close, getting close. And even before, your technology is already available right for some selected customers?

Mark: Correct. The technology is available, it is available for enterprise sized clients, has been available now since the middle of May. We're presently serving clients with enterprise-size needs and we're doing beta testing with smaller clients who want to have their 360 and VR content tagged with time based and location based metadata. And we're also doing consultation with those clients who are interested in learning on about how they can adapt their present digital asset management systems to begin to read index and return search queries with content that has been tagged with time based and location based metadata bark.

Balint: Mark, during your career, now going away a little bit from the topic, just the immersive media, your entrepreneurial career. I love this question, asking this, what about mistakes, what kind of mistakes would you pinpoint, would you highlight in your career that you made? Because I think we all learn from mistakes. So, yeah. Do you have something on your mind?

Mark: Well, look, at the very beginning I was sort of very adverse to mistakes and whenever a mistake occurred whether it was choosing a wrong client and/or handling a client's content in the wrong way, we viewed it as a complete failure and a failure that we were ultimately shamed for. However, we began to change our tune as years passed by and we recognized that mistakes are bound to happen and when they do happen, they are learning opportunities.



And so we've adapted the way that we approach problem mitigation and problem solution. And mistakes will happen and they continue to occur even in the most advanced technological companies. And every day there is always something that we come upon that we attempt to solve in the best way that we possibly can. And in the rare case that we are incapable of solving it, of course it is a failure and/or a mistake. And so, then we are forced on the fly to build, to develop, to design a workaround and to mitigate that problem for the future. So, we've become incredibly adept at documentation. We document everything.

If there's anything I think that we've learned from our mistakes is that documenting everything, both by video and by text, is a key factor in preventing mistakes and creating safety nets or safe solutions, failsafe solutions I should say. And so, we know that mistakes will happen again. I'll repeat a hundred times, mistakes do happen, they will happen. But we try as much as early possible to mitigate in advance by asking lots of questions and whenever they do occur to view them as learning opportunities and attempt to solve them. So, I'll leave it at that.

Balint: If I may say, your risk tolerance during the years and also your risk hunger has increased because the latest one, the VRmeta product, is definitely I can see the risk hunger increasing in a way.

Mark: Well, I think you're right about that. And I sort of tend to take the view that opportunity that you're going down a road and every once in a while the road will fork. And when that road forks and presents an opportunity, you should take it. And that opportunity normally, in my mind, is represented by a large green field with nothing on it and that I can build anything I want. And with the arrival of consumer grade 360 or virtual reality cameras and the continued price drop for headsets, I recognize that consumers this upcoming Christmas and in the upcoming years will be presented with means to make that content.

And just like in the early days of telephone based or mobile phone based photography when efforts like Picassa and Google's picture photo library and other categorization and asset management softwares literally popped up overnight to house these tens of thousands, hundreds of thousands, tens of millions, hundreds of millions of photographs that were all of a sudden being generated by people's telephones. We thought that immersive content demands a standard of metadata application, which, as we could see from our knowledge and from research, never existed before.

Look, this is all in real time. Virtual Reality content, 360 content, augmented reality content is all being developed in live form at this very moment and nobody has set up any standards. And I thought, "Well, here we are. Let's do it." And so, we're taking the risk, we're jumping into the fray. We recreated this tool kit and we're quickly or we're



rapidly rolling out as much information as humanly possible to consult with companies that are interested in adopting this technology and making that content that they've created searchable and well, hopefully monetizable.

Balint: Fascinating story. So, now I would love to discuss more this immersive content but I would say we should try to now steer the conversation to the last section of the interview, which is the ultrafast round, if you're fine with that. So, this means that I would ask four questions and it would be great to get relatively short answers to these. So, the first question is if you could go back in time to the time when you were in your 20s or around that age, what notes would you give yourself?

Mark: Well, now you're going to force me to think. Even before I came in, I haven't been able to answer this question. I have to really give it a wild thought. What notes? Wow. I don't know because I oftentimes think about this and I tell myself, "You know what? I am a sum of all of my parts. I could not be who I am today if I wasn't who I was then."

Balint: Yes. So you would not really give notes to yourself because it just had to unfold like this.

Mark: Right. I don't believe I could be who I am now if all of those mistakes didn't occur, if I didn't do all of those things, I would not be me. So I am a sum of all of my parts.

Balint: The past and the present. Yeah.

Mark: Correct. That is critical.

Balint: It's a good point. Good insight. Second question. If you had to name a book or even a couple of books, which ones had the biggest impact on your career?

Mark: Wow. I would go back in time and I would read I would say Norman Mailer's *Armies of the Night*. I would also say Kurt Vonnegut's *Slaughterhouse-Five*. I would also say Tom Friedman's book *From Beirut to Jerusalem*. I'm sorry. I hope I get the title correctly. I might say those three books have perhaps the greatest impact on me. I mean, I think that all of them... I read all three of those at critical moments of my career. So, yes. I'll leave with that.

Balint: Yeah. I will get back to you maybe later because I want to put these into the show notes so listeners can download and check them out.

So the third question. I'm amazed by habits and I think they can have a really good positive effect on your life. And do you have some morning routine or some other kind of daily routines that help you?



Mark: Yes, I do. I am up incredibly early each morning. I'm up just before 5:00 AM every single morning and just before 5:00 AM until about 6:00 - 6:30 I read through the New York Times, The Washington Post, the Daily Mail, perhaps Spiegel if the new edition has come out and any one of another half a dozen technical journals, maybe I will go on to CNET, maybe I'll go onto a TechCrunch, Gizmodo. And I'm a voracious reader, so I read as much as I possibly can before I walk out the door about 6:30 in the morning to go off to the office.

And so, that morning routine as I said starts just before 5:00 AM and it involves a good cup of coffee and my iPad, and I might even actually double my content just by having my telephone literally on my left hand and the tablet on my right as I plow through as much media and information that I might need to sort of make my day much more informative.

Balint: Yes, so you prepare for the day with a lot of information.

Mark: Correct.

Balint: Ingesting information into your mind, so to say.

Mark: Correct. Correct. I feed myself huge volumes of information every single morning.

Balint: Using the terminology you're used to.

Mark: Correct. That's right. That's right. I'm a victim of my own PR.

Balint: Last question is that in your work, because you travel quite a bit and you said that you had also some operation in Romania and you have clients worldwide. What kind of cultural differences would you highlight that were critical and to realize them and to overcome them?

Mark: Well, I think the biggest differences that cropped up almost immediately was the way people interpreted or approached to work and the way people approached the media generally, in other words people's interpretations of are they newsworthy when it came to news photography, especially with Northfoto at its early stages. What people viewed as being worthy of paying for? What kind of content people were willing to pay for? People's work habits. Every country has different work ethics or work morals.

And so, we, myself particularly, we as a company, me personally had to literally learn whole new business cultures as the company matured and as the level of responsibility grew and grew and grew, I came into contact with a large variety of people. And so, year after year you sort of accumulate this encyclopedic knowledge of how peo-



ple are expected to be treated and you have the capacity then to also interpret what they're actually saying or to decode certain nuances in speech and body language.

Balint: Yeah. You definitely picked up a lot of the know-how along the way.

Mark: Sure. Oh, absolutely.

Balint: Yeah. This can be named to this like project-based learning. Because you had a big project which was your entrepreneurial initiatives.

Mark: Correct. And that's very well said. That's correct.

Balint: Yeah. So we've come to the end of the interview. These were the four questions of the ultrafast round. So, before we now conclude, what would be the best way for the listeners to reach you, by e-mail or social media?

Mark: So, they can go on to my LinkedIn page and they can contact me via LinkedIn and I respond normally within an hour or so. I'm also on LinkedIn throughout the day irrespective of where I am on the planet, I'm checking in on what's going on in trends within the media world and outside of the media world. So, via LinkedIn they can contact me. They can also go to the vrmeta.net page or the microstockolutions.com page.

Balint: Excellent. I will put it into the show notes, again, so that the listeners can reach it.

Mark: Thank you very much, Balint.

Balint: So, I appreciate it. Mark, I had a really good time discussing this content and I learned a lot about the importance of VRmeta that it's an emerging field, green field, that you are basically pioneering, because there are not many players on the field.