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Brian Seth Hurst

Bonjour. Welcome. Bienvenue. I am Brian Seth Hurst and I am here to take you on a little tour of virtual reality with my colleagues today; Ellie Ngim from BeVRR, Torsten Hoffmann from Virtual Content Group and Raphael Beaugrand, who is the Director at Okio Studio and I personally am a producer of virtual reality. So we're just going to go through a couple of examples, then we're going to sit down and talk. I just want to take a quick survey of the audience, even though I can barely see you. How many of you have been inside an Oculus or an HTC VIVE headset? Well no wonder you're here, that's pretty good. How many have been inside like a Google Cardboard or something like that? Great. How many have watched VR on your mobile phone? Even better. On the web? Because that's what we're going to play with a little bit today. How many of you are producers or storytellers? Terrific. How many are directors? Great. Anybody from commercial broadcasting or public broadcasting that are program commissioners? Terrific. So now we know our audience you guys. So we're going to start out. First, let's see who's up first. So, Torsten, you can just tell me when to click and tell us a little bit about the Virtual Content Group?

Torsten Hoffmann

Yes. Hi, my name is Torsten, Virtual Content Group. So we are a group that recently merged. It's three businesses from Australia, Germany and France and the idea was basically if we're bigger then we're more interesting for investors, more interesting for big partners. If you could just click one more time. So my background, I'm based in Australia, was distribution. So I started with 3D, you know, stereoscopic 3D content many years ago, then 4K and now 360 videos. So that's kind of my angle and the Germans and the French are much more on the production and post production and together the idea and the pitch is basically to be one of those few global VR companies. There are a few. We just talked about the American ones that have raised hundreds of millions of dollars and we want to be one of the non American big VR giants. If you click one more time, I know I only have 90 seconds. That's just some of our customers and you'll find not only traditional media brands and broadcasters there but also advertising clients, right. So we do gigs for BMW or for Disney or whoever calls us because we're really specialists in these camera technologies. I think I've one more slide that I just wanted to show here. The Gartner Hype Cycle, I'm sure many of you are aware, you know, new technologies come and then they're being hyped and then they crash again and the inventor of this Hype Cycle, Gartner, kind of published and says OK VR has now hit the right spots. So after 25 years, 30 years of VR being,

you know, not really a thing, now it's a thing, now it comes to mainstream and it's in that slope of enlightenment and I actually think that's not quite true yet. I think the technology isn't quite there yet, the resolution, the ... devices, the content, the storytelling, there's so many things still wrong with VR and that is not going to be a slope of enlightenment, I think it's going to be a very rocky and bumpy ride and that's why it is important for us at least to be diversified and to have many, many projects, you know, mastering all the different technologies and not only work with one distribution platform but with dozens and dozens. So that was the idea behind that slide and I'm sure we'll talk about that later.

Brian Seth Hurst

Great. So I just want to say, and I'm sure my colleagues will agree, VR is the fastest moving industry I have ever been involved in. Just this week alone Windows 10 announced that with every computer they can bundle a headset, that will be in January, or in time actually for the holidays. IMAX announced a deal with Warner Bros. to show content in IMAX VR arcades. In China VR arcades are exploding. The 360 advertising market is exploding and in terms of funding content, Jaunt, Nokia, Nvidia, AMD, most of the tech companies now have funds to fund content. So there is a way to get funds. If you are a scrappy, independent film producer this is the place to be because you really have to cobble together things. OK, so now Raphael from Okio, sorry, Ellie from BeVRR and I'm going to show a piece. This is something new here. We have installed a 360 video player. I just want to say this is better inside a headset experience but this will give you a little view.

VIDEO CLIP

Brian Seth Hurst

So in this, if we follow the stars...

Brian Seth Hurst

Great. Ellie, sorry about that. Working so hard to make this work. If you could tell us a little bit about BeVRR?

Ellie Ngim

Yes, my name is Ellie. I'm based in Singapore with operations in South East Asia. So, just

echoing a little bit about what Torsten and Brian mentioned just now, that technology's moving so fast, you know, where's it progressing and then we have all these commissioners, networks and companies trying to figure out how they can leverage or tap into this technology, for advertisements, for content creation and I'm sure all the filmmakers out there as well have tried their hands on using this technology to tell stories. So BeVRR is actually a spinoff from a feature film company and equipment rental company in Asia. We started out, you know, just out of curiosity, how do we tell stories in this medium and you know, one of the powers of why stories are so powerful is that it creates a connection on an emotional level with people and I feel with VR it enhances this experience as well for users. So I'm sure we're going to discuss a little bit more about the state of the market and where we are at. So maybe we can pass on to Raphael.

Brian Seth Hurst

Yes, we will. We're going to move pretty quickly. OK, so now Raphael, hopefully.

VIDEO CLIP

Raphael Beaugrand

Here we are in Syria. Before we were in French Guiana with the French army, the Legion. Now we are in Syria, in the city of ..., which has been destroyed because of the war and this is the first 360 degree video in Syria, shot, not by myself but by a Syrian that I taught how to deal with the camera. So this is the video with which we came out of the bush in September 2015. It has been seen more than 700,000 times. So here is the first test I did with French firemen in Paris and paired it with them going at the place of the crash. Here you can be embedded completely with the firemen and observe and experience their everyday work. Here it's something I did for a company named NG in a camp. Here we are in an electrical plant, hydro electrical plant and here it's something I did with Michel [Gundry], which is a director who has been doing a factory within which you can shoot your first movie, for children to shoot their first movie, to write and shoot their first movie in three hours and here is something I did for a DJ and now it's something I did in a kitchen with Michel [Traroux], which is a famous chef. Here now we're at the Moulin Rouge with the dancers. I shot the preparation of these girls and now it's like a time lapse from ... Church, both in Paris. Many things.

Brian Seth Hurst

So hopefully we're beginning to fire your imaginations just a bit. The thing about virtual reality is it presents a great opportunity to factual and documentary and you can actually bring in a lot of practices from documentary. But we'll talk about how basically, if you can tell a story in 2D, tell it in 2D, the techniques that we use in virtual reality are far different. What I'm going to show you right now is My Brother's Keeper, which we produced for PBS. It's a story of two brothers fighting on the opposite sides of the civil war.

VIDEO CLIP

Brian Seth Hurst

So we can switch back. If you'd like to see My Brother's Keeper it will actually be at the VR theatre downstairs in the Palais on Monday. So, wow, you know we were going to talk about consumers as we move ahead. But just real quickly. This is the continuum of content. So you can have fully immersive content inside a headset or you can have 360, which you just witnessed. When we're producing content we have to think about where the audience is going to be and what our clients want to see as well. Most of us I guess we produce an immersive and then let it come down into 360. So this is just a little bit and it's showing you VR domes at the top, 3D 4D dark rides, all the way down and all the way through. So this is the ecosystem and the environment that we're dealing in. You could see, this is courtesy of you guys, yes. You can see here where the growth is. So the industry is growing and even though Torsten said, you know, it is kind of the Wild West, we're learning a lot every single day. Every single day there's not a single one of us that isn't hacking and that isn't figuring out how to best use the technology to serve the story and that's what's incumbent upon us. So this is the forecast for global headset shipment. So, we just, you know, for storytellers and stuff, we're not the ones that have to figure this one out, maybe Torsten's company does but we don't have to figure this out, we just have to tell great stories and that's what we're going to talk about here. So, there's that. Where are you going to earn your money? So these are all the places, and you'll excuse the term for those of you who are traditional filmmakers, we call them flatties now. But these are all the places that you can start to bank on content. This is all the different content genres and then here are consumers' experiences and what they're interested in. So you can see, this is across many verticals, it's across travel, there's medicine, there's education. So it's not just in entertainment and documentary. There are many areas right now where VR is going and I think that we all agree that's going to sustain our industry, that it's not just dependent upon entertainment. I just

want to get into our discussions. Here's what Digi-Capital expects where investment will be, in augmented reality, which is putting information on top of an environment. They say that's going to lead. We can also talk about mixed reality, which is the combination of immersive content and information. I think that's it. So, great, let's get in. You can go back to that main slide. Thank you so much. So, we just talked a little bit about consumers but we all have technology challenges that we're facing every day. So we were sitting up here and we were talking a little bit about choosing cameras and post and stuff and I'd just like to get into what the state of the market is and the state of our industry is in terms of the technology, what it takes to shoot. So let's start with you, Raphael.

Raphael Beaugrand

Yes, so it's a co-element to have a proper ... to shoot and post produce your content because I think now the content is the king because we are at the beginning of a market and we can't be deceptive. If we are deceptive it's a big failure and then we wont... as a producer, as a director it will be a one shot game. So we were thinking a lot about how to shoot and how to have a good post production process, to have no stitching errors, which is very difficult to have no stitching errors, at least you'll have one, sometimes two.

Brian Seth Hurst

So stitching, for the audience that doesn't know, you're taking pictures with multiple cameras and those images have to be stitched together into a sphere before you can even actually edit properly. So you have all this information, all this data coming from the cameras and then you have to stitch and I will just jump in, we have so little time, what percentage of your budgets go towards post production?

Raphael Beaugrand

It's more than half of the budget.

Brian Seth Hurst

Yes, I'm running about 35%. How about you?

Ellie Ngim

It's about half I think.

Brian Seth Hurst

And in the production timeline, how long is post compared to the shoot?

Torsten Hoffmann

Twice.

Brian Seth Hurst

Yes, three times.

Ellie Ngim

It's a lot longer than production itself that's for sure.

Brian Seth Hurst

It's a lot longer. Torsten, when you talk about the technology, what are the mistakes that new filmmakers make when they jump into VR?

Torsten Hoffmann

Yes, so in a fast moving medium like this you don't want to be using technology that's from last year or maybe from two years ago and I think a lot of people make the mistake, maybe trying to figure out their own rigs and then it's a monoscopic 360 image that maybe was useable two years ago, maybe one year ago but in the future you have zero shelf life for that content so you want to shoot stereoscopic 360 or you would want interactivity already or room-scale already. So there's a lot of technologies that you should be at least looking at and then depending on what the use case for your film is. So the role of our company is then to help a creative guide you along that journey and help you with equipment or advice.

Brian Seth Hurst

So I'm going to translate a little bit. So room-scale interactivity, that would be like the HTC VIVE and Oculus, with sensors that are able to track where you are in an experience. How for some, we can just follow the experience and walk around and in other instances you can interact, in other instances you can actually look and get under. So I mean there is quite the continuum of content. You want to explain like volumetric scanning and all the different choices there are to

tell a story? I realise we have only a half hour and we're talking a foreign language, so we're trying to translate.

Ellie Ngim

Maybe for the benefit of everyone, you know, just a quick run through about the entire process of content creation in VR. So fundamentally we will come up with a concept of a story and then what we do is we shoot it. Now the difference in VR is after you shoot it you need to stitch it, that's in post production, you stitch it and then you cut it and then you grade it and then on top of this, in post production as well, this is where spacial audio comes into play, all because the mode of distributions is now different. So, you know, going back to fundamentally the concept, once you know how VR works and how you shoot VR, conceptualising your idea would be very different as well. So, say for example, when you shoot a film, having an eye out about 360, it changes the way you direct, it changes the way you act, if you're in the artist department, it changes the way that you shoot as well. Now, you know, going back to technology, I think cameras, hardwares, sooner or later, as we can already tell, in terms of trends, it's really catching up. So, for myself, I feel it's very essential to understand the process of VR and then you let the hardwares and technologies catch up.

Brian Seth Hurst

That's a great idea.

Brian Seth Hurst

Right, we were talking about earlier, the close up scenes in our piece, we actually invented a rig, and you talk about building your own rig, so you really kind of have to be part storyteller, part hacker. I just want to go back to the process for a minute. First of all, to tell a story in VR the best way to do it is close your eyes and imagine what you want people to see. In documentary you have the opportunity and we're going to talk tomorrow, Torsten and I are going to talk tomorrow about best practices in VR, what there is today, but you have an opportunity to produce, a lot of people say empathy, I got in because of compassion. But the bottom line is when you start your pre production is completely different than it would be for traditional film and you really have to think things out, you don't have time to futz on the set actually. Like in traditional film you basically know your cameras and you know what they can do but in VR different cameras have different purposes that serve, have different capabilities. Some are low light, some are not, every

camera has its drawbacks and every camera comes with errors right now. So we're still figuring all that out and I think one of the best things to do is there are consumer cameras available. Your VR just came out with a new one yesterday and you're able to test and you can do some pre visualisation with that but just to get the feel of the medium, there's a lot of courses online now and there's a lot of chance to learn. But we had a little discussion about bad VR and there's a lot of bad VR being produced but the best way to tell a story right now is someone, if you're going to be a producer, is like to get inside a headset, right, and watch as much as you can. So I want to go to sound. We're moving so fast. I want to go to sound and I want to go down to Raphael because we talked a little bit about the importance of sound. Some people think sound is the lost child of virtual reality and it's the last thing to consider, but we all know it's the first thing to consider because you have an emotional response to sound anyway. So I wanted you to talk a little bit about sound.

Raphael Beaugrand

Yes, the sound is very important. It makes 60% of the immersion but for documentaries, yes, we are shooting reality so, from my point of view, I need to adapt myself to what I'm shooting, paying attention to the sound and I use a very simple way to take the sound but in post producing it you have to be very accurate and make the best efforts to have the best sound.

Torsten Hoffmann

Can I just add in. Remember, you don't have the ability to direct the viewers' direction, right, you don't know where they look, so you can use sound as a mechanism. So the helicopter comes from the back, so people start looking at the back and seeing it and in order to do that I guess you can fix it in post, I'm not the expert, but ideally you would capture the sound spacially. It's also an array of microphones in order to capture it accurately, three dimensionally.

Brian Seth Hurst

I mean there's so many sounds that you can sound. Our sound design happened completely in post. So you only saw the trailer but everything that you see was done by a sound designer and so all those sounds are available and are in sound libraries and you can pull from them as well. You might not be lucky enough to get an ambient sound that actually works and so that's another great consideration and from anyone's perspective, I mean, yes, sound moves people but we also have 5.1 and ambi and stereo and they're just like five different sound formats in

every platform where you distribute VR has a different sound spec and so that's also a challenge. When you look to educate, because now we have to drive our medium forward, so this room was packed for the last session, we're not so packed now. What is the challenge in explaining to clients and traditional broadcasters and traditional commissioners why they should use VR right now, why should they get in right now?

Ellie Ngim

So VR is a medium, again going back to what I mentioned just now, why stories are so powerful because it creates a connection on an emotional level, but for VR it enhances that. So, essentially going back to Raphael and Torsten, when we make VR films, just think, rule of thumb is think of yourself as you being there. So for brands, for companies and for networks as well how can they use or capitalise on this medium to tell stories is extremely powerful, especially for documentaries. UNICEF tested it out on a content with Chris Milk and they raised I think about seven times more than conventional fundraising content and then, subsequently, in Asia as well we did partner with Mercy Relief and a couple of NGOs to test out contents made with VR and the results are that people empathise more with victims or the disaster strikes or the places and if you want to look at the numbers it's there and if you get a chance just take a look at the hits, be immersed in it and then you can tell the difference I think.

Brian Seth Hurst

And there's been a lot of progress in the level and quality of documentary filmmaking over the last year. we did a piece for Showtime for the election and actually paired a documentary film editor, a traditional documentary film editor with a VR editor so that some of those best practices from documentary could be brought in because it is storytelling. It is challenging, it is not impossible, it is time consuming, it is very rewarding. If you're a documentary filmmaker or a factual you really have to think, like Ellie said, in terms of the best way to tell the story because you just don't plunk a camera down in the middle of an environment and hope that people are going to get that experience. I actually did see in some of the content that was being shown at the opening session, the homeless man in Norway, that could have been told in VR and if I walked past a homeless person I could definitely ignore them and not see them in real life but if I'm in an environment I've got a certain degree of safety, a certain degree of distance while I'm having that experience and there are lots of studies about how VR tricks the body and what you think you're seeing and what you feel, so it's quite a different medium. I wanted to give you guys

a chance to ask some questions. I know we've talked about an awful lot but if we looked at trends we could say there's tech investment, the trends are really growing fast. Samsung, every year they introduce better headsets. We're going to have wireless headsets that are connected to computers. There's content funds that are coming from the technology companies, factual entertainment. Nat Geo has its own distribution channel in VR, Discovery has its own distribution channel, PBS will have its own distribution channel. So those channels are there. It's a market that's starting. It's maturing very, very quickly.

Torsten Hoffmann

Can I just add one thing. So think of this as a journey and we're just at the first step. So, in the future, with all these billions of dollars of investment in it we will be able to sit next to the elephant and walk around it, so that's room-scale and actually touch it. So even though you're in virtual reality, because you're wearing these gloves that Facebook is already working on, right, you touch something digital and you get that feedback and you can play, you can play sports, you can throw balls or whatever with somebody else in VR. So what we're here with 360 videos with little rigs that we built together is just the first step.

Brian Seth Hurst

And you must have great storytelling no matter where you are in the process because it's great storytelling that's going to capture the minds of consumers. It's great to have a platform but you need a great story. I've seen people get in the headset and not see anything spectacular and never want to get in it again. Any questions out there? Yes?

Unknown male

Can you give some examples of how ... reality can be utilised in documentaries?

Brian Seth Hurst

I can. First of all you can use that as a graphic user interface, especially in mobile. It can be done inside the Oculus and inside, what Torsten was just talking about, interactivity, but if you're doing something on climate change you can actually bring up the statistics as a graphic. People can move through those statistics or they can scroll through those statistics. Again, it's up to the storyteller about how to use it. The biggest challenge in VR and AR right now is to you as a storyteller, to not use the technology simply because you can use it but to use the technology to

bring in deeper levels of the story or to move the story forward. That is the biggest mistake that's being made right now, is that people are just ringing bells because they can. But augment relative gives you a layer of interactive information. You can pull up bios, it's same thing as graphics in a television show but you don't want to use them to distract. The other thing is thanks to technologies like ... cinema you can change those graphics out. So if later the client's statistics change you can actually update those statistics inside the film that you've already made. Other questions? Does that answer your question?

Unknown male

We are in the early stages of VR and 360. When we produce it it's always complementary to a bigger story. You can have complementary VR experience. How do you work with that as a complementary storytelling?

Brian Seth Hurst

I can speak to that because that's what My Brother's Keeper was, it was a complementary piece to PBS' Mercy Street, which was a prime time drama. So they wanted something set in the civil war that would drive people to Mercy Street and their budgets were more marketing budgets for that. But we work with networks to do those programme extensions, as do you. To do those programme extensions it's really important for us to keep look, tone, feel, everything on brand but usually, right now, it's coming from marketing budgets and in many cases it's a collaboration. Like our next project is a full collaboration with the show runners and the producers. So we help them to understand VR and what they can do and we make sure that we give them what their audiences are already expecting.

Ellie Ngim

And other example, if I may jump in. When you watch a feature film, how VR can complement it, for example it gives you the choice to choose your ending as well because it essentially places you as one of the main characters. Say for example if Tim were to enter a door on the left or Tim were to enter a door on the right it essentially changes the ending that you want to see because then it acts as a complementary to the 2D content that you're watching.

Torsten Hoffmann

Or what about Star Trek episode where you enter into the holodeck and the holodeck is the VR

thing, so it's an integral part of the story. So it starts with behind the scenes in the theatre, which is a great idea, that you don't get to see it in 360 but it could be an essential part of a story that you can only watch and fully experience in an immersive environment.

Raphael Beaugrand

So it's complementary or for us, just you or it's only in VR because Okio report it's only journalism documentaries, it's completely separated for the French Guiana it was a part of 52 documentaries that they asked us to do it in VR, a short nine minutes VR documentary but also because I thought it was very important to do it in 360 I decided to do it by myself only in VR because immersion, the experience is unique with headset and it gives us more information or another one, empathy he was talking about it, but like an experience that the public couldn't experience without it, I want to make the story then.

Brian Seth Hurst

Yes, I got in because of compassion, just because there's a shortage of that in the world. Raphael, Torsten, Ellie, thank you very much. You can see this is a really broad and deep topic area, there's so many things. I would say get in, learn it, trust your gut. Thank you very much.

CUT