Oral History of Chanel Summers

Interviewed by **Michael J. Halvorson** for the Microsoft Alumni Network

September 1, 2023

Preface

The following oral history is the result of a recorded interview with Chanel Summers as conducted by Michael J. Halvorson on September 1, 2023,, at Microsoft Studios in Redmond, Washington. This interview is part of the Microsoft Alumni Network's Microsoft Alumni Voices initiative. The goal of this project is to record the institutional history of Microsoft through the recollections of its former employees, so that the information may inform and inspire future generations.

Readers are asked to bear in mind that they are reading a transcript of the spoken word captured through video rather than written prose. The content reflects the recollections of the interviewee. The following transcript was edited by the Microsoft Alumni Network, which holds the copyright to this work.

Interview

Michael Halvorson: My name is Mike Halvorson and I am here with Chanel Summers, who is going to talk to us today about what Chanel did at Microsoft. And this is part of the Microsoft Oral Histories project. So, thanks for being here, Chanel.

Chanel Summers: It's wonderful to be here. Thank you so much for having me.

Michael Halvorson: You're very welcome. I want to begin with just where you are from and where you went to school.

Chanel Summers: I was born in LA to Canadian parents, and I attended USC, the University of Southern California (Go Trojans!), where I studied philosophy, classics and political science. At the time I went to university, there weren't any game design programs, but a lot of us very early game design folks had actually studied philosophy in school, which teaches you how to think and approach different problems. There's just so much [to] study about logic systems that philosophy has real direct implications for game and level design.

Michael Halvorson: What companies did you work at and how did you eventually come to Microsoft?

Chanel Summers: I began my career as a video game designer and producer, developing innovative products ranging from high-performance 3D vehicle simulations to action and arcade platform games to hardware peripherals while working at early industry-leading companies such as Mindscape, where I had responsibility for the P&L of a $20 million product line, the *Mario* educational series, which was one of the most visible in the company. I was also at Velocity, which [were] the makers of the first networked video game, *Spectre VR* [in 1993]. And then also at Mattel Media.

Because of my experience in game development, Microsoft had tried to recruit me to the Entertainment Business Unit for a few years, but it was never the right time. I was always working at some other game company and was living in the Bay Area. But

when my husband got an offer to join the company, he was asked by his recruiters if I needed any assistance in finding a job in the area. He told them that they've been trying to get ahold of me to join Microsoft for a while now. So, the very next day, I received calls for three different positions to interview for with the games group.

Chanel Summers: I was ultimately offered all three jobs. But because of my background in networked gameplay and the urgency for help with the *Fighter Ace* game, it was obvious where the company really wanted me to go, which was the Internet Gaming Zone.

Michael Halvorson: And so what year was that when you came into Microsoft?

Chanel Summers: 1997.

Michael Halvorson: 1997. Okay. And then, so what were your different jobs or roles in those early teams that you worked on?

Chanel Summers: When I was initially recruited to Microsoft in the late nineties, they were just pushing into video games. I was responsible for the release of Microsoft's first multiplayer Internet game, *Fighter Ace* [late 1997], which was an air combat simulation that was on the forefront of the rise of massively online gaming. *Fighter Ace* was this online-only sort of World War II aerial combat game. It was the company's first pay-for-play game that allowed for more than a hundred gamers to play

simultaneously in the same flight arena. That was really a massive accomplishment for the time.

That was with the [Microsoft] Internet Gaming Zone. But while working on *Fighter Ace*, I became enamored of some amazing new interactive audio technologies that Microsoft had acquired and incorporated into the DirectX team. I transitioned into that group myself as Microsoft's first audio technical evangelist, where I was responsible for launching DirectMusic.

DirectMusic was this revolutionary new method of creating and delivering interactive music and sound design. I was also responsible for establishing programs to get audio professionals more involved in the design of Microsoft technologies. In fact, I was very successful in increasing the use of Windows as a platform for audio creation, at a time when Mac really ruled the audio world. For example, getting longtime Mac-only pro audio applications to add Windows versions, as well.

Then, with the inception of Microsoft's Xbox video game system in 2000, I was tapped to help design and promote the audio capabilities of the new hardware platform. I was instrumental in defining hardware capabilities and programming libraries, evaluating, selecting external vendors, and managing the creation of audio-specific demos that would showcase the console.

Michael Halvorson: Let's talk about some of the audio features in the first Xbox. What sort of challenges were connected to that?

Chanel Summers: Well, the Xbox was a really great vehicle for evangelizing what audio could do. Because we developed the Xbox, audio was very critical to us. DirectX audio, like DirectMusic and DirectSound technologies, became sort of set in silicone. Everything was hardware accelerated. We weren't really hardware designers. We were software developers and composers, and audio designers and artists. So, we wanted to create hardware that would do wonders for the software and show off the software. We had all this DSP [Digital Signal Processing] functionality and we were the first ones to also have an integrated Dolby encoder. So, we ended up creating this very breakthrough audio subsystem.

Michael Halvorson: Were there competing systems at the time? You said the Mac was one, and the other consoles, did they have awesome audio too, or was [the] Xbox going to be ahead of them?

Chanel Summers: Well, what I will say is when looking at most consoles at the time, we noticed that they had heavily invested in graphics, but less so in audio. We believed that audio is incredibly important and had to lead the graphics in quality. As graphics got better and better, poor-quality audio becomes much more noticeable. What I always like to say is, “The ears don't blink.” So, audio is… like a drummer in a band. A really great band will be brought down by a not so good drummer, by a mediocre drummer. But, on the other hand, a mediocre band will look like a great band with an awesome drummer.

Audio has that kind of effect with its relationship with graphics. We also believed that there was an opportunity to take advantage of environmental modeling, hence the realism of console sound effects, which traditionally were pre-processed. So, between our audio APIs, the powerful audio processor, and built-in hard drive, we really aimed to have superior audio on the Xbox. The other thing too is, we've seen how constraints on the amount of RAM compromised the quality of audio and graphics, as well. So those were the things we were really thinking about…

Michael Halvorson: What kind of audio tools were people using back then to create audio, to mix audio?

Chanel Summers: Back then, most audio tools were traditional linear mixing applications, like Pro Tools. There were very few, if any, interactive audio technologies. So, the DirectSound and DirectMusic APIs were the main audio APIs for the Xbox. One way to look at the audio processor is that it was the physical embodiment of DirectSound and DirectMusic. Now, I also want to note that at the time, audio had pretty much just been like wallpaper in games. It didn't really play a role in games, it was just there as a background. It didn't have an integral part in the game.

But [modern] games are non-linear. Therefore, non-linear games should have non-linear music and sound. Now with DirectMusic, which was, in particular, just super breakthrough,

you could have audio that paralleled the narrative direction of the game, and that actually played an integral part in the whole experience. A couple of examples I would always give is that even if you've got the best, most fabulous John Williams score, which is pre-rendered and linear in nature, eventually, after the third, fourth, fifth, sixth time someone plays the game, they're going to shut that volume down because the score becomes annoying and repetitive.

It's upsetting that the sound always gets turned off and the sound is part of the game. So, with DirectMusic, you are able to create variable audio, meaning the audio could dynamically evolve and change and therefore would never loop or repeat. If you think about hours and hours of gameplay, you can also have hours of audio play. So, when I go into, say, different locations or rooms in a game's environment, even if I keep going into that same room, the instrumentation can subtly change, [with] different chord progressions, different notes. All of a sudden, everything's minor, the tone is a bit different. The same goes for soundscapes.

I personally hate having to hear the same death cries from enemies. Nobody dies the same way. Or that same dog that barks every three seconds. That just breaks the suspension of disbelief. With DirectMusic, you could have these variable soundscapes and that would just give you a much more realistic experience. The other thing is that you could have interactive or adaptive audio. That means that the music can actually adapt to whatever's happening on screen. But the converse is true, too. I can have the music control the visuals, as well. So, if a person is walking, I can have the music control the beats of how this game character is walking. Or if the music goes to [a] minor

[key], that could trigger a game character to jump out in front of you. So, the music could actually control the whole landscape.

Michael Halvorson: That's really, really interesting. I see that you were involved in creating a support team or program for content creators, which seemed like a place where the graphic artists, sound designers, composers, and game designers might interact and get coaching about what's happening with this new Xbox. Can you describe the program that you worked on a little bit and how it was new for Microsoft?

Chanel Summers: Yeah. I saw that we had provided all these amazing support resources to programmers, but who's looking out for the creatives who have to understand the capabilities of the system, just as intimately, in order to create the state-of-the-art assets that will be incorporated into those applications? So, that really led me to the creation of the industry's very first support team for content creators. As you said, a team of graphic artists and sound designers, composers and game designers who would work with the development community, coaching these game creators to take advantage of the capabilities presented by the Xbox.

The Xbox Content and Design Team's goal, and my mandate as its Worldwide Creative Manager, was to help game creators around the world apply technology and features into design, in order to really help usher in that era of the next generation, or future generation, of games.

Michael Halvorson: So, the Xbox came out, it was amazing, and people loved it! But eventually, you wrapped up your career at Microsoft and [went to] work elsewhere in the industry. Talk about that a little bit and how that changed you.

Chanel Summers: Sure. Absolutely. So after having worked in the field of music, audio, and technology, I really wanted to pursue more pure uses of music and decided to become a professional drummer, and to do whatever it took to make that happen. And I did [laughs], and ended up recording with, and performing frequently, in a number of nationally touring bands, working alongside such bands as Missing Persons, The Dreaming, Smile Empty Soul, The Last Vegas, Endless Hallway, and Vast, and showcasing in festivals ranging from CMJ to South by Southwest (SXSW).

Then after that, I co-founded Syndicate 17, which is a very unique audio production, design, and implementation company that's based in Seattle and Los Angeles. [It] specialized in assisting highly innovative companies that were focused on interactive, dynamic, and immersive audio to build industry-changing product.

We did sound design, music production, [and] audio implementation for location-based attractions and virtual, augmented, and mixed-reality products. Now also during this time, while I was doing that, I also lectured and consulted and developed and taught a new course at the University of

Southern California's Interactive Media and Games division in the School of Cinematic Arts, which really focused on the art and aesthetics of creating audio for video games. The course is called Audio Expression. I also worked with the USC faculty on the creation of a dedicated minor in interactive audio for students looking to specialize in that area.

Then, after a number of years of leading my own audio production company with Syndicate 17, which I said had specialized in creating audio design and asset production for game studios and tech companies and location-based attractions and theme parks and VR, AR, and MR products, I was then recruited by VRstudios, which was the leader in location-based, out of home, virtual reality to lead their game development teams consisting of both internal teams and external outsourced resources.

While at VRstudios, I and my team delivered leading products for entertainment centers, theme parks, cruise ships, casinos, and other venues around the world. These ranged from first-person immersive shooters to celebrated VR-strategy experiences and beyond. And I was actually responsible for oversight of the industry's first LBE, or location-based entertainment, to consumer-linked title… I [also] helped to design and deliver the first successful VR iteration in the *Halo* franchise for the *Halo: Outpost Discovery* traveling show. That was done with 343 Studios and Herschend Entertainment.

I also conceived of, and my team delivered, the first line of real sports, VR sports titles and the VRstudios Sports product line,

where we melded VR and sports into a new category specifically for location-based entertainment, which included products such as *Hoops Madness* and *Football Frenzy*. These were both very well-received by the industry. I also oversaw the design and delivery of eight immersive VR titles for the proprietary motion simulator, co-designed and operated by Dave & Buster's across the United States.

Our titles were based on some of the most recognizable licenses ranging from *Star Trek*, to *Men in Black*, to *Terminator*, and *Transformers*. And now, I have recently accepted a position with Universal Destinations & Experiences as Creative Producer with the Digital & Technology Innovation Team in Orlando.

Michael Halvorson: That's fantastic. What an incredible lineup of really, really interesting things. And I didn't know about the drumming, so I'm really now grateful for that, too. But looking back at Microsoft and what [you] carried forward [from] there, was there something about Microsoft that left a lasting impression for you or that you kind of carried forward?

Chanel Summers: Well, the biggest thing that made a lasting impression was getting me involved in audio technologies and interactive audio development and evangelism. As I said before, when I came to the company, my background was in game production and design. But because of that lecture I attended on that new audio technology that Microsoft had acquired, which became DirectMusic, that was a very real pivotal moment for me, and I had to work on it. So, Microsoft created this brand-new role for me, that I moved into, and I made my transition at that time to

audio. And that was the DirectX audio technical evangelist role. So that made more than a huge impression [laughs]. I mean, that changed a lot of my life and what I did.

Michael Halvorson: Can you share a few moments of success or pride at Microsoft that stand out for you?

Chanel Summers: Well, two major moments of pride are, one, helping to pioneer and launch DirectMusic, a revolutionary method of creating and delivering interactive music and sound design. And two, of course, Xbox! We were really making something historical. It's not every day that someone creates a console, let alone a successful one. And the audio subsystem was way ahead of its time. And we saw the Xbox as a machine that was created by artists for artists.

Michael Halvorson: Well, I want to thank you so much for your time. If you have any closing comments, you [are welcome to offer] them. But we've very much appreciated your participation in this project and your amazing memories.

Chanel Summers: Well, thank you so much. I will say that I really learned how to be well-rounded at Microsoft by being able to participate in a lot of different activities. As I've said, I came in as a designer, producer, and I gained skills in evangelism, product management and audio technology. And all of these have been highly valuable to me post-Microsoft. I mean, for instance, in the creation of my own audio company, as well as when I went to work for VRstudios, which was an early-stage company,

where you had to wear many hats. Microsoft really exposed me to a lot of different fields. So, I was very adept at working at startups and early stage companies. I really thank Microsoft for giving me those life skills.

Michael Halvorson: Well, thank you again so much for your time, and I will look forward to talking with you again. Thank you.

Chanel Summers: Thanks so much, Michael.