

# Oral History of Steven Sinofsky

Interviewed by **Mario Juarez** for the Microsoft Alumni Network

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## Preface

The following oral history is the result of a recorded interview with Steven Sinofsky as conducted by Mario Juarez on August 22, 2024, 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

Mario Juarez: You're just basically going to do the introduction. Alright?

Steven Sinofsky: Hi, I'm Steven Sinofsky. I started at Microsoft in 1989 and worked through all of 2012 and although I held many jobs, I started as a software design engineer and ended as the President of Windows.

Mario Juarez: Alright, let's begin at the beginning. Where were you born? I know where you were born, but tell us the story of your arrival upon planet Earth.

Steven Sinofsky: Planet Earth. Well, I was born in New York City and for the first 10 years of my life, lived out on Long Island, which you can tell because of the way I say Long Island. And then our family moved to Orlando, Florida, which at the time Disney was just five years old, so it was mostly orange groves. And that's where I went to school from fifth grade on, went to a giant sprawling public high school and then went back up to New York to go to college because my algebra teacher told me I should go to this specific college that she had gone to. So I applied early decision, had never been there, showed up to visit after I had committed to go in the middle of February, which turns out maybe we'll get to February and Ithaca, New York is an important time and went to college there. And then went to graduate school in Western Massachusetts at UMass Amherst and then got disgruntled with graduate school and sent in my resume to the address on a copy of Microsoft Word that I had won at convention, a conference for academic computing, a door prize literally for Best Booth or something.

Mario Juarez: Alright, let's unpack that. Born in New York. Tell me about your family. What did your parents do?

Steven Sinofsky: When we lived in New York, my parents had worked in the fashion industry, which was a very classic first generation American Jewish upbringing. But my father just could not commute on the Long Island Railroad anymore. And so he said, got to pick up the family like the Beverly Hillbillies almost, and moved us to Orlando when we opened up a family business in sporting goods.

Mario Juarez: Tell me about your parents. Were they immigrants?

Steven Sinofsky: Both my parents were born in the us two immigrants and so they were first generation American. My father's side I knew well, but not super well. Whereas my mother's side, I got to know it very well as they lasted longer.

Mario Juarez: Can you describe your parents to me? What kind of mother and father? Tell me about them.

Steven Sinofsky: Have you seen Seinfeld? Yeah, that's them. Jerry's parents. And we all say that everybody from the same cohort, that's who their parents are and there's no escaping it. They're personified. But my mom was very proper and very mannered and still very Seinfeld. And my father was really a very astute business guy. In fact, he wasn't a technologist, but he was a businessman. He was a buyer for women's coats and suits that got him into just being a wholesaler and a buyer in general. And what got me into computing was him, which is the strangest thing. He went to four colleges in four years and didn't graduate.

And then his first job was selling women's accessories at Macy's in Manhattan like Mad Men during the Mad Men era. And so when I see Mad Men, that's my father. I would go into work with him when I was a kid for once a year or whatever. And it was literally visiting the Mad Men offices. It's the same, all the fonts, all the design, everything was the same. The suits, the men on the train, it's perfect. But he opened up this business in Orlando and that was in 1976, '75. And then in 1981, he's expanding the business and I do not know, and I never asked him, and he's passed away when I was in college while he did this. But he bought a computer, he bought an Osborne 1 computer, which was a 64K, the first portable machine that came with five programs — a word processor, which was called WordStar, a spreadsheet called SuperCalc, which was a clone of a spreadsheet called VisiCalc, which was the predecessor and inventor of the spreadsheet and a couple others including something called MBASIC, which wasn't to be confused with another program it came with called CBASIC — and he bought it.

He was a graphics artist. He drew. He had no math/computing background and he literally looked at it, bought it and told me to, and this is back when to buy a computer you put on a suit and you went to a computer store where other

people had suits and it was like buying a car is today almost. It was a crazy experience.

Mario Juarez: What year are we talking about here?

Steven Sinofsky: 1981.

Mario Juarez: 1981. So, You're like 16.

Steven Sinofsky: And the only computer I had used was my very best friend's brother, younger brother's dad bought an Atari for playing pong and whatever with cartridges. And I used to go over to their house, kick the brother off, and then write business programs and BASIC had to compute sales tax and stuff. And because they didn't have a tape deck or anything, every time I went over I had to retype the whole program starting over. So I got very good at it and then I figured how to use it. And so I ended up writing an inventory and accounts receivable payable sort of system. But I didn't know accounting law or rules or anything. I just sort of made up all this stuff of, and the summer before my senior year of high school, I ended up, a teacher of mine's husband also had one of these Osborne computers, which it was huge.

It was like the size of a sewing machine. It weighed like 35 pounds, but it had a five inch screen that only showed 52 characters across and two 90k floppy drives. And I used to sit and program all night, all night, every night. And my sister's bedroom was right next to the room where the computer was. And she would wake up and she would come complaining to my parents, make him stop clicking in the beeping. She was like five. And she wanted the noise to stop and the noise was this every time you hit save on something. And so I wrote this whole program and then I have to go. And so my teacher's husband was like, oh, you need to just do this for people. There were all these people, all of maybe a dozen in Orlando had bought Osborne's just like my father for no, and they had no idea what to do with them. And so I would go to each one. There was a banker and a talent agent and a real estate agent, and I would just ask them what they wanted and write some program for them to do something like a talent agent wanted to take a list of all of the people she represented and be able to search across them for do they have blue eyes or are they six foot two or what size do they wear? And helped her do that. And I would write these programs like that for that summer.

Mario Juarez: I'm trying to get a sense of,

Steven Sinofsky: Yeah, 16. Yeah.

Mario Juarez: What kind of, I mean, so you have how many siblings?

Steven Sinofsky: Just my younger sisters, five years younger.

Mario Juarez: You have a younger sister and they're five years younger and you're just this kid on Long

Steven Sinofsky: Island? No, this is in Orlando. This is in Orlando,

Mario Juarez: Kid in Orlando. And tell me what kind of kid were you? How would you describe that Boy, if you look back and say what kind of person I was,

Steven Sinofsky: There are a bunch of old TV shows that sort of personify who I was. I had two really good friends that basically were all of the boys. They would call us the three of us, and we basically sat in the back of the room and made fun of everybody between ourselves. That was pretty much what we did for four years of high school. And we had known each other since I moved to Florida since fifth grade. And we're still best friends, but we were definitely, we played Dungeons and Dragons, we read books. The three of us dressed the same, which was like no one else. And we were good in math and science had calculators. There's not a stereotype we missed exactly what you would expect of someone who got into computing in the 1980s with an

Mario Juarez: Osborne computer events program.

Steven Sinofsky: And for business. What would make a 6-year-old write business programs other than growing up in a business environment?

Mario Juarez: Well, many people do that. Not many people actually sit around and write programs. What was it about that unique challenge of coding that appealed to you? Tell me about why you did it. What inspired in you, what it meant to you?

Steven Sinofsky: I think asking what computing meant and how it inspired you is such an important thing because it's so tied to the history of Microsoft because using a computer, what it allows you to do is create your own world where you're just in charge and you can craft this world the way you want. It's the same thing. If you're able to do something as difficult as write fiction, you can create this environment. It was like when we created our Dungeons and Duns and Dragons, you can just make it whatever you want. And programming just had this way where you could create a world. It was just incredible. And because it's such an important part about what made Windows what it is as well. And what made DOS what it was, was that it wasn't something that required a whole library of books or 15 people or hours of class time.

It was just you being committed to the craft. And so I could just click and beep all night and keep my sister awake and every day I learned more. I'll never forget the time I learned. I'll never forget the time I learned how to make a database have two tables connected to each other. It doesn't matter what that is, but I learned it and it was like it unlocked so many capabilities and I just learned it by trial and error or the time I had to give the, my father had to use the computer and I was really afraid he would just type ERA and customer list. It

wasn't, or custom text and delete all of his customers. I couldn't have that. He didn't know what he was doing and I had to write everything out in instructions, print them on my dot matrix printer, do step one, step two step.

And so I realized I could go into the disc editor that I could download from over 300 bod from a user group, which is the only way to get software. And I could change the name of the delete command and if I did that then he would never find it. And so I could make special floppies for him that didn't have the ability to delete files and that feeling of empowerment to create this world that my father could safely maintain his list of customers, which if you're a small business, that's everything your customer list is. I mean I spent a whole summer once just typing up a list of all the customers he had from various leads and business cards and letters. But is that feeling that you could control and create a world and then turn that over to somebody and have them just get stuff done? And so if there was a theme for me, all of my own computing, it was tools to create worlds so that people could do what they wanted to do.

Mario Juarez: It sounds like you that found you more than I see many young people I meet now is they have this vision early in life I'm going to become a developer, I'm going to become an engineer. This seems like maybe it was more organic for you that you just were in this process of opportunity and discovery and that you sort of found your way. Reflect on that. If that's a true statement, tell me about it. But was there a moment when you realized this is the thing for me, this is the destiny.

Steven Sinofsky: For me, figuring out when I was going to be computers versus what my mom expected of me, which was a doctor, was a process. The first time I started to think I wanted to be into computers, turns out the Time Magazine Machine of the Year, which was the 1982-3, I'm actually going to get the year wrong on that, which is annoying. The Time Magazine Machine of the Year came out when I was a senior in high school and I was also taking the SATs. So I got it and I was all over it. I love the issue. I still have the one that I had at the time. It was an important part for me. My mom looked at it and she said, we have to have a talk. And she's just holding up the magazine looking at me like, no, this is not you.

Because they were pictures of people with no shoes and flannel shirts like hippies, no. And I had written on when you took the SATs, then they always ask you all these market research questions, what do you want to be? What do you want to major in? That had nothing to do with your score or anything. So I wrote that I wanted to do computers. I circled, I filled my scores, came back and my mom was like, you can't write this. And so I get to Cornell for college and I'm in the arts and science of school where you can major in whatever you want and my assumption is that I'm going to be a biology major or a chemistry major and go to medical school. So I have all those classes and I took the intro computer class, Intro to Chemistry, which is actually Cornell. It's always hard, but it's some at the time, the thing that all everybody could talk about was that Kurt Vonnegut used to write about this class Chem 207 at Cornell in his books and all

the smart people got a's in Kurt Vonnegut's book for taking Chem 207. It was my highest grade that I got in chemistry in four years as a chemistry major, a B-.

So I was abysmal at chemistry. So I actually ended up not yet deciding but just double majoring in chemistry and computer science. I got an A+ in the Intro Computer Science class. This was long before AP computer science or anything. Nobody knew computers. When they got to school in 1983, I was the only one in my dorm. I brought that Osborne that I had to school because my father was running the software to run the business and if something was broken I was going to have to fix it. And so I had this debug machine and I did my papers on it and I was like an alien to the dorm. Nobody did this. It all changed by the way, in between first and second semester of freshman year because the spring of freshman year started in 1984 and in the spring of 1984, while we were all home watching the Super Bowl, apple ran a commercial and that commercial introduced the world to Macintosh.

I came back to Cornell, and there were Macintosh's on campus, no small thanks to former Microsofty Dan'l Lewin and Dan'l was working for Apple at the time and he's one of the few people on earth who worked both for Bill and for Steve Jobs. And Dan'l had created the academic computing program that brought Macintosh to universities. And it turns out he created the whole idea of doing an end run around those computer stores. You had to go to buy a computer in the first place because it turns out you weren't allowed to ship computers by the post office or UPS, you had to have an FCC license and you had to use the special carrier because they were radios and electronics and there was no shipping of those as an individual back then. And he worked out a whole program so that college students could get computers.

And that changed everything, and it changed everything for me. That made me a Macintosh person. And so many people of that era that went to the Ivy League or to Stanford or to MIT, they became Mac people because of ex-Microsofty Dan'l and the work he did when he was working for Steve Jobs. And that found me, it was just pure luck. And so I had stuck with chemistry and computer science just to appease my family, but I was never going to get into medical school. There was no chance I had B- my first semester and it was downhill from there, but I stuck with it. And at one point I was one of the first to use a computer to do lab reports. So I did a lab reporting chemistry once and I used the Xerox star, which Charles Simonyi had worked on and the predecessor, the invention of the graphical computer.

And that Bill had famously seen at Xerox and everything. And we had one in the Cornell Computer Science department. So I did my papers on it, it was, and laser printing was free. If you used a Mac, you had to pay 15 cents a page to use the laser printer. And so I did a lab report once with it and I made it two columns you would see in a journal like Science or Nature. And this was my sophomore or junior year lab report. And it was like a work of art. I mean it had graphs and equation. I mean it was beautiful. My professor, who I'm still friends with to this day, wrote on it in giant red ink. Absolutely marvelous looking lab report. How

did you do this? Content is absolute crap. And it was because I sucked at chemistry and I was really great at formatting, but it was also part of it was that exposure to the Xerox exposure to the Mac, all of which just happened because my father bought this computer and my best friend had an Atari.

I mean I was in Orlando, Florida. This is not like a tech center. I was at a big public school. The only computer that I even knew about before the Osborne, the Atari was next to our principal's office in high school. They had a Radio Shack, TRS-80. That was the only, I went on a bike trip one summer and the kid from California on the trip was going to some prep school and he had an Apple. I had never even heard of Apple. And I told him like you would if you were in ninth grade or whatever. Well, I've used a TRS-80 and he looked at me and he's like Trash-80. I hadn't used it, I'd just seen it next to the principal's office because the three of us got sent to the principal's office once and he said, Trash-80, nobody uses a Trash-80. I had no idea what he was talking about. I wouldn't have known what to do if a computer was thrown in front of me.

Mario Juarez: So you get through Cornell, you got a joint degree in ...

Steven Sinofsky: Just double major. Yeah,

Mario Juarez: Yeah. Double major, double major that you do. How did you find your way to Microsoft?

Steven Sinofsky: Well, so I went to graduate school for computer science and I was be a professor. I had done research on, and this is actually relevant to getting hired. The research I had done was with a professor who basically for all practical purposes invented what was called the syntax directed editor. And you could think of that as an editor that knows how to program. And my freshman year we had used the first version of that which ran on one of the earliest microcomputers called a PP11 by digital equipment. And it was a marvelous thing. And to anyone today it would look like using, listening to this, it would look like Visual Basic except only in DOS in character mode. It was a remarkable, remarkable invention at the time. And I got lucky enough to work in his lab. In fact, computer science in the eighties was not a real major.

There was a department, but it was kind of a joke. It was in the engineering school and nobody thought it. The joke was anything that's called "science", political science, social science, computer science is fake and they call it science to distract you. What was real was electrical engineering. So there were like 25 people who graduated in computer science and like 200 who graduated with electrical engineering. If you were smart and could do math, you were an electrical engineer, otherwise you dropped into computer science. I was in the arts and sciences school and computer science was my option and I was double majoring anyway, so I had stuck with it, but I really fell in love with academic computing and I loved the research and it just seemed like a natural place. I was going to be a professor, but in parallel I was also doing research in the chemistry

department and in the chemistry department I had to dream up my own project rather than just work on.

And so I came up with this idea of using the new Macintosh to do a program to display the periodic table of the elements about the only concept of chemistry that I fully understood was the periodic table, which is something basically from ninth grade everybody knows. And so I made a program that drew the periodic table on the Mac and then you could say make the periodic table graph of electron affinity versus atomic number. And I had hundreds of these chemical properties in a database and then it would do all these graphs and charts and really fancy ones. And the chemistry department was blown away Who does this? Because they weren't using really, they were just starting to use Macintosh. And so actually even though I had a best case C average in chemistry, I got honors in chemistry for writing that program. So then I'm going to graduate school and I go to University of Massachusetts at Amherst and working on databases and programming.

I just very cutting edge stuff, object-oriented databases. And my advisor is a leader in the world of databases. It's exciting. But we spent a lot of time writing grant proposals and talking to who were telling us what to do, which was very different than me dreaming up my periodic table called Mac Mendeleev and writing Max or working on what I did with the sax editor called the Cornell Synthesizer. I just kind of got disgruntled with graduate school and I had presented this Mac maelstrom of program at a conference, which was the first conference I'd ever been to. And I won this Mac, I dunno why the whole thing is a blur. So they gave me, it was the brand new color Mac and it was awesome and a monitor and everything. And then I won it and then the Microsoft sales rep for Ithaca, New York, do not ask me, go ask Scott Oki why there was a Microsoft sales rep in Ithaca, New York or wherever I was at the time to say, Hey, what Microsoft software are you on?

And I'm like, micro who? And Microsoft, would you want any micro? I'm like, well what do you make? I used a Mac with Mac, right? And Mac paint, I mean it's like 1986. And I used what was then called Unix, which kids today will think of as Linux. And I used Unix and I did everything on Unix, what people going to graduate school were going to do. And she's like, well, do you need a word processor? And I was like, no. I'm like, well, let me send you Microsoft Word. I'm like, whatever. I got Mac and I was just going to go and use it to talk to the mainframe in graduate school. And so she sent me Microsoft Word and so I can't make this up. Had no idea. Again, what were they? I didn't understand what I mean. I knew what a sales rep was because of our family business, but still it was very weird.

And I get this envelope in the mail from Microsoft and I opened it up and it's a demo version of Word. It was good for five pages and it expired in a month and it just pissed me off. I'm in graduate school, I have no money. I'm not going to go buy your program because you said you were giving it to me. So I actually wrote a letter. I just said, what is this? So then they sent me a real one and she



called and apologized, the sales rep. And it turns out it was because she's like, well, we had a bunch, but then they made us send them all back. It was because it was Mac Word 3, which had been recalled for quality, this very buggy version of Mac Word. And so then I had this fancy copy of Mac Word, but it turns out that one of my lab mates had written another Macintosh word processor already called FullWrite Professional. So we all use that because he got us free copies and as I learned later, that was a big scary competitor Microsoft at the time. But we just knew it was Roy Leban and FullWrite Professional who also ended up working at Microsoft who might still be at Microsoft.

And so I'm in this throes of depression in February of 1989. I have two years into a year and a half into graduate school I'm going to leave. And I had worked on a presidential campaign. I had a job offer from the White House to be in the situation room programming staff or something. I have no idea what it was. And I had commercial companies that I was doing a job search and I said, what the hell, this company that sent me buggy software and I literally sent my resume to NE 36th Way, Box-whatever-it-was, Redmond, Washington on the box. Next day after they got time to get it, I got a call. Hi Steven, this is Chris Whitt. I'm a recruiter at Microsoft. You know her. Hi, I'm Chris Whitt, I'm a recruiter at Microsoft and I'm like, hi, what's Chris Witt?

What kind of name is that? That's my email name. It's Chris Wiris. And I'm going to stop just for a second and say Chris was a dear friend of mine and she passed away about 10 years ago. And so Chris on moving, moving, moving fast, fast, she's like, I'm getting you a plane ticket. We're going to fly you out for interviews. And back in those days when they met get you a plane ticket, it meant that an envelope from Airborne, which was a Seattle based overnight mail company that's not airborne anymore, shows up. I'm in a college apartment and this Airborne guy shows up and he's in a uniform with a truck and hands me this overnight envelope and these overnight they look scary. You had to sign show id. It was a big deal with an actual ticket to get on an airplane. And so I'm like, I'm going to Washington.

So I go to Washington - back then you would get a rental car and I'm driving in on the 520 and it's magical. I see a building for Digital Equipment, which is by the way, where Dave Cutler had worked. I see the Apple building, there's a logo for the Apple. And to me, having been to Boston many times it looked exactly like Route 128. Every logo I could think of had a building right over just before you get off on 148th, that whole row on the right side. And I am staying at the Residence Inn and I had stayed in hotels for job interviews before, but never one with an extra room and a fireplace. So I checked in and it's February and it's cold and raining, so I start the fireplace. I never really used the fireplace before, didn't understand the whole idea of the chimney and the smoke and stuff.

And so I set off the alarm and filled the room with smoke, A lot of discussions who would pay and damage and stuff like that. Got up in the morning, every started at eight, put on my Brooks Brothers suit, walked over to building one. Hi Steve, I'm Chris Whitt and this is Whitney Chen. And Whitney is going to, she

wasn't Whitney Chen then, but we're going to escort you through your day. And I interviewed with seven of the smartest computer people I had ever talked to. People like Scott Randall, Jan De Vries, Jan Gray, because you didn't tell me to prepare. I'm not going to get their names all right. It would take me a minute. I actually have them all written down conveniently in the book "Hardcore Software." So, I should say, what address did I mail my resume to? I said the address on the box, but I also happened to have, the reason that I looked on the box was because I had gotten a free subscription to Macworld, the tabloid newsletter.

And when I won that contest, that was another part of the winning. And so I'm getting Mac World delivered to me and it was like an industry trade, which I was used to because I knew about trade pubs for my father's business. And in the back of Mac World was a full-sized ad to join Microsoft and the subject on the ad, the type on the ad was hardcore software. And the text, the ad in the giant font that we used to use for ads was, do you want to write the hardcore codes? Does writing tight code excite you? And all of this stuff about writing code, leading edge computers, all the resources you need, building software, what the hell? So that got me to go look at the box again, which had been sealed sitting on a shelf in my dorm or my apartment.

And so I go through these interviews and these interviews are the most remarkable contrast with all the other interviews I had. They didn't ask me to repeat my resume, they didn't ask me about essay questions about computers. I remember I walked in one of the meetings, one of the interviews, I literally sat down and I had on my resume like what everybody does back then you used to just list all the computer things you worked on. And I had MVS, CMS, VMS, all these MS's and monitoring system was, and I sat down and I'm pretty sure it was Jan De Vries who looked at me and said, "How would you compare MVS and VMS?" And I had to come up with what the difference, and so that's a big test of do you really know these or are you just making it up? I remember Scott Randall was like, well, tell me the difference between object-oriented programming and structured programming, which was easy.

That's like a grad school question. But then he said, what do you think about the language of C versus Pascal and all these things like that? And it was just a remarkable experience. And so just the whole day. Then we went out to lunch. It was a little weird to go out to lunch because Michael Donat, who became a professor in computer science after he left Microsoft, he took me to the Kirkland Roaster, which used to be down the street. And he was Canadian. Actually, five of my seven interviews were Canadian, all from Waterloo. They all had those mean leather jackets that said "Comp Sci" on the side. Very weird. Pasty guys with "Comp Sci" leather jackets did not really understand that. Although I understood pasty guys being as I was in college in the Northeast and we go to the Kirkland Roaster and he orders beer, which I'm like, who gets beer at lunch? It was the weirdest thing I'd ever experienced. And then we went to Benihana for dinner, but I had to drive because he didn't want to drive because he wanted to drink. And I'm like, that's kind of weird.

I had this incredible interview. It was just incredible lunch with beer, dinner with saki at Benihana or whatever it was. And then it's just so on the ball. I was used to the government taking a very long time and commercial companies slogging through. I didn't get the postcard saying I didn't get a job at Apple until I had already been at work for like a year. And meanwhile Microsoft was just rocking. And so Chris calls me, makes me a job offer and I'm being old coy, well, I'm going to have to think about it. And the offer is cookie cutter. There was no negotiation, there was nothing. It was \$27,500 and a thousand shares of options or whatever the offer was. I remember 27.5 because it was lower than the other offers I had. And I caught my uncle who worked on Wall Street, he told me the options were worthless so much for Uncle Harold's financial acumen at the time.

But I am thinking about it. I'm being the idiot trying to negotiate for more salary. And Chris is talking, she starts sending me the Seattle Weekly every week to tell me what bands are playing in the city — as if I cared about bands. She sends me a few Microsoft press books, more software I'm not going to use, and she's calling me all the time. She's doing her job. And then my lab was about a mile and a half from my apartment, and I used to walk to it every morning — and back then you had an answering machine, like a physical tape recorder connected to a physical phone attached to the wall — and it just said, "Hi, you've reached Steven, please leave a name or number, I'll call you back." We didn't care about privacy or anything back then. And so, I'm walking into the lab one day and there's a message on the chalkboard — chalkboard, not a whiteboard — that says, "Steven, Call Bill Gates. He called."

I'm like, whatever. I ignore that because I had told a friend of mine that I went to college with who was from Seattle that I was interviewing for a job in Seattle and I had told him when I flew out. He was like, "oh, you should meet my parents" or whatever. And I was too busy burning a hotel down. And so I just ignored it [the message]. And then I got home that day, 12 hours later and there's a message on my answering machine. "Hi Steve. This is Bill Gates. Could you call me back please? My number 206 or 425, no, 206-8288." I ignored that. I just assume it's this friend of mine, Brent. Next morning, I go to the lab. New message: "Steve, Bill Gates called again. Call him back." And this went on for three days. Finally, I'm home, and it's late. A guy named David Pritchard calls me and David says, "Oh, I'm really glad to get ahold of you. My name's David Pritchard." He actually said his whole name, not David PR.

"Bill Gates has been trying to get hold of you, and he really wanted to talk to you about your job offer." He was Chris's boss in recruiting. He was head of college recruiting at the time. And I'm like, "Oh, so it wasn't fake."

"You thought it was fake?"

"Well, I have this friend who grew up in Seattle, blah, blah blah." So we make a time, and I'm sitting by the phone now, you used to have to do plus minus 10 minutes, the phone rings, "Hi, this is Bill Gates." And we start talking and I don't

know why he's calling me. I don't have any context for any of this. I actually don't know much about him. What I knew about was BASIC from my Osborne and BASIC was Microsoft BASIC and then this bogus version of Word that they sent me. And he starts talking to me, he's like, what are you interested in?

And I said, well, and then back you're used to selling your unique high tech. And I'm like, well, I work on object-oriented databases, the syntax of persistent data, and I have this whole thing. He's like, well, we do multimedia at Microsoft. I had never done anything multimedia. I don't know why he was telling me about multimedia, but he's telling me all about multimedia and this encyclopedia they're working on and the value with CD-Rom, you could hold 650 megabytes and includes videos and quizzes and he's telling me about all this stuff that I'm not working on and my job offer was to work on something that was vague. And so I'm like, okay. He's like, where would you think of working otherwise? He's fighting with me. And he's like, where would you think you're going to work otherwise? I'm like, well, I'm a big shot. I have offers to work in the government.

He's like the government. I am not making this up [unintelligible]. I swear the government, that's what you should do when you're old and stupid. And I'm like, well, okay. And so the call kind of just, okay, no more questions. I have like eight people I have to call on this list. So he broke the fourth wall and he's literally making calls down some list that probably David handed him of people to call, which now I know, of course we used to do all the time. And it was a list of people that they wanted to close that were taking a while. And so got off the phone. I will say that really didn't persuade me. It was mostly talking to Chris and the fact that they wouldn't negotiate. I said, well, I probably should take the job that they're not throwing more stuff at me.

And so I just said yes. And that was how I got at the company. Where was your first day? My first day because I got hired into Apps and that's all that it really said on the offer letter application, software, design engineer. And when you got hired into apps, then it was a very small window of about two years where all the college hires were hired into the apps development college called a DC, and it was run by Doug Klunder and Dan Newell. Dan Newell was a developer on multimedia. Doug was a Microsoft legend by then having written the ReCalc engine for what became Excel and all by himself. Then he got in a fight with Bill that was super famous over whether to build a Windows spreadsheet or not. He wanted to release the DOS spreadsheet that he had written called Number Buddy. And Bill was making the pivot to Windows.

Doug quit, went and picked grapes in Southern California and came back to basically work on ADC or create it. And then he went and wrote Microsoft Money and there was this apps development college. And on my first day I showed up in my button down shirt and khakis and ready to go. And there was no one to talk to me, nothing to do. I had no idea what I was doing. I was sitting in a room going through printouts. There was a computer that didn't do anything. It didn't connect to any network. Finally, I went to Steve Winter's, SteveWee's orientation, and even back then somebody was going to raise their

hand and ask about the medical plan about their personal preexisting condition just like they still do. And opened my bank account at the first Geek Boy Credit Union down the street and all of that stuff and got my email name and I'm looking at it and it's printed out on a line printer and I'm looking at it and it says, email Steve Si.

I'm like, no. My email name is Steven SI, that's what it is in college and grad school, I always was Steven SI get to the office that they'd assigned me and it's in Building 4 and the placard is engraved already on the door, which is super cool except it says Steve Sinofsky. And I'm thinking, who the hell is Steve? And I'm not a stickler about saying my name, but it literally made me cringe to see it written that way. You write your name, what's your name? I talked to a guy down the hall, I walk over to his office and I just other people and I'm like, are you new too? And he's like, yeah. And I look, oh well, hi Tony. And he cringed. He's like, I'm Antoine. Antoine Le Blonde. And so Antoine Le Blonde was a new hire as well from Montreal, Quebec. He Quebecois hence Antoine Le Blonde. And they, in whosoever made the name engravings, had changed his email name to Tony L, which is just ridiculous. I thought Steve was. And I however do not make waves, so I didn't say a word. But Antoine's then-girlfriend, now-wife, Lucy, Lucy Rubatai was not having anything of that, and [she] made him actually complain because he complained he got the really cool email name antoine@microsoft.com. I didn't complain. So, I was stuck with SteveSI for an eternity, and I'm still stuck with it.

But that was the first day. I learned later Steven Schwartz was a salesperson in New York, and he had already had Steven S. So, I was never going to get Steven S, and I'm glad I didn't get Steve Sin or something worse than that.

Mario Juarez: Were you a PM?

Steven Sinofsky: No, I was hired as a software design engineer. So finally at the end of the day, Scott Randall shows up and Scott — pasty white Canadian from Waterloo — and he tries to very quick. You talk very fast, explain what was going on and that I was going to be in this Apps College for some amount of time. Unbelievable experience to be in the Apps Development College. I had heard about training programs before at Arthur Anderson. Today. Accenture had this elaborate training program where they bought a college, GE had a training program, but this was hands-on. One day you show up, and it's like, “today we're going to learn how to fix bugs and Word.” And literally you brought up what was called raid the word bug database and they'd assign a bug to you. It turns out it was a copy of the Word code from that point in time and the database and with people that I was in there with like Antoine or Andrew Craze or Dave Schulman, we just did fixed bugs.

And then Doug would ask us to write code and explained to us how to write real bulletproof code. So, I had a really defining moment about this, which in graduate school I had studied this thing called garbage collection, which is not what you think it is, but it's a way of managing memory in a computer such that

the programmer is freed from having to manually allocate memory and deallocate memory. The computer does it automatically. It was rocket science in the '80s and it was also slowed your computers down and used way too much memory to make it practical.

But in research those things don't matter. My advisor was sort of an expert on it. And so we did a lot of work on garbage collection. My bugs that I got assigned were these bugs that wouldn't exist if they had used garbage collection for Excel. So I marched myself into Doug's office and Doug's office had nothing at all in it. Literally nothing including no shoes because Doug didn't wear shoes. There was just Doug, his flannel shirt, his cords and his beard. And he looked like a member of the Doobie Brothers, but he was one of the most brilliant programmers on earth, literally on planet earth. And I start explaining to him how Microsoft needs to be using garbage collection. And I'm surprised, but not really that a company wouldn't understand how to do modern computer science. And obviously I'm assuming I was super obnoxious about it because how else would you be?

And Doug's like, turns out he's super patient, he can be as direct and as ruthless tech as anybody, but he was in this teacher mentor mode when he was doing and he's like, you know what you should do? I want you to go meet a friend of mine and explain to him what bugs you could fix and solve and he's going to help you to understand real bugs in the real world. So he sent mail to this guy JonDe and his name's Jon DeVaan and Jon is going to help me. So I make an appointment to see Jon and I go over to his office, his office, which is one of the standard inside office at the time, standard mod. He had an inside office, he didn't want to waste the window and he had this giant contraption of a desk that was two levels so we could have more computers.

I had never seen so many computers in one office. That was back when everybody was doing that. And the original X buildings were really under stress from the amount of power being drawn by all the computers if they had a lot of devs. Jon was at the time a dev lead on Excel and Excel for Windows hadn't yet shipped or is about to ship. Oh, actually I take that back. The first version had shipped the Excel 2, which was the first Windows version had shipped. And so I'm over and he had shipped already. He was on the original Mac Excel team, Jon with Chris Peters and MikeCos and everybody else, well five of them. And so I am explaining garbage collection to Jon and he is from Minnesota and he's super calm, the nicest person you could imagine. And he's like just tell me more and he's asking me questions and then he brings up Product Studio and he starts asking me, how many bugs do you think happened from memory management and Excel and I don't know, thousands based on my four hours of experience and looking at bugs. And he does a query and he's like, we had seven.

And so he is like, so we don't really want to use all the memory that we just talked about when it fixes seven bugs. Instead, you should listen to Doug Klunder and learn how to write code that is constantly checking in the debug

version if you have memory problems. Not that you make every customer pay for memory management. It was unbelievable. And, of course, from that moment on, Jon —and I count Jon as a mentor along with Doug and Dan Newell — and that cohort of people from a ADC was incredible that lessons. Doug has a binder that he gave us and it has all the seminal Microsoft memos, which were very few at the time. It had Paul Allen's DOS 2.0 memo. It had the Zero Defects Memo, which was brand new at the time. It was unbelievable. It was hardcore software.

Mario Juarez:

Speaking of memos and I know that it was one that had your fingerprints all over it, the Internet Tidal Wave. So give us a quick tour from that. Thank you for that fantastic description of life in that first phase. You obviously evolved pretty quickly, and you did tours through some of the most important cornerstone products that the company had at that time. But really my sense of you, and I may correct me if I'm wrong, but I'm not sure that the company would have caught the internet wave that it caught without you. I know there's many, many people, but you seem like from where I was sitting, one of the pivotal characters in that whole drama. So, take us through time quickly and then let's get to that point in time, what you were seeing.

Steven Sinofsky:

So I was on the group. The group I was in after ADC...One day, Scott just shows up and says, we need you. And so, Scott, I get a real office, I move my first Microsoft move, I have a real office and there's like six of us. But the thing that I want to talk about is another guy, Jeff Harbers. So Jeff was the original manager of what became apps and he had joined Microsoft as a grownup. He had already had a job which almost no one did apps. The biggest contrast between apps and systems, which were the two halves of Microsoft, it was always called systems languages, which was really systems and languages and then apps. And apps was just like another world. And for the sake of this, it's a very important distinction. The systems world and the languages world was really Microsoft.

That's where it all started — the languages. I remember my first company meeting, which was probably in the fall of 1989, they gave out the five-year awards to five people. And I remember they went and took their, I'm like, oh my God, these people are so old. One of them, Dave Weil, he had a family, he had a kid! Who had children? I didn't know anyone that had children or owned their cars or had a whole house. It was unbelievable. And so these five people worked almost grownups. As it turns out, I ended up working in Silicon Valley with Dave's son who had just been born then who has a storied career in Silicon Valley as head of product at Twitter and Instagram and all sorts of stuff. But what I did is I joined this group and Jeff had previously run the Word for Windows project as the head of apps.

And the Word for Windows project was a complete disaster. It took years longer than Bill thought. And there's a whole great story about that. And in the middle of the project, Jeff just had a meltdown and yelled at the whole team and he said, and this is all documented, I have footnotes. It said, this is the worst development team that Microsoft has ever put together. And people like Rich

Brody and Chris Mason and everybody, it was unbelievably jarring and it was not at all like the apps culture, the systems culture said stuff like that. It was sort of this direct from Bill. The apps culture was all kids. The systems culture were all these grownups that had jobs elsewhere. They were hired, they had been at Microsoft five years. It's a different world. It was the Bill world. The apps culture would become the Mike Maples world.

And Mike once explained this, actually about this time, explained it to me, which was Microsoft has two bountiful gardens. It has the DOS World, what became the Windows World, and it has the Apps World, which by the way, at the time was selling Mac Word, Mac Excel, and more than half the company profits had been coming from the Mac applications on Mac, there was DOS, but the Mac had come out and no system, nothing in Windows was competing. There was no windows yet really. And Mike said, the systems world as a garden, you look at it and there's dirt flying and tools all over the place and people cutting their fingers and yelling. But there is a garden at the end of the day and it's a beautiful garden. You look at the apps garden and there's people standing around and it's just a nice garden, just as nice as the Windows garden, the System's garden.

But no one cut themselves. There was no tools flying around. All the tools were organized. And at first you think, well, that's just super insulting. But then he goes on to explain the DOS business and the BASIC and the Languages Business. They had to be created out of nothing before DOS. There was no software world, there was no operating system world, there were just computers. You bought that tossed in free software. What Bill did to create that world was he had to, he was out over skis. He was making stuff up. I mean, the famous story, I mean, yeah, you should buy BASIC from us. We'll just write it on the plane for a computer that we've never seen before as he and Paul are flying to Albuquerque. Oh, IBM, you should have an operating system. You can't get his, why don't you get ours?

We don't have one. Where are we going to get an operating system? And then just kept going. We want to help people make compatible computers, but they need a BIOS. But IBM has a BIOS. Let's get another company to make bios for computers that don't exist with huge intellectual property against IBM, but we're going to help 'em anyway. So it is obvious why you had to be that kind of aggressive and it was that chaotic. Whereas Word and Excel, we're like, well, we know what a word processor is, but we're going to do one that's just so much better. And we're going to do that by thinking about how you do design, how you do user interface to build a spreadsheet. We're going to put on suits and we're going to go to the banks on Wall Street and learn how they might use a spreadsheet and make it better.

And so it became this refined, what we used to describe, because in the eighties, this was the right, as the Japanese culture, this increment, improve, listen, iterate, methodical, reliable. So we just released constantly. I mean Excel three, I mean imagine a product. Nobody can make anything work. Windows



was years late. Excel three shipped 10 days late. That's what Chris Peters and Jon DeVaan and team did. I was hired in. This is again, pure luck, unbelievable. I was hired. So, Jeff Harbers called the team the worst ever. He kind of said, I probably should take a break. And so, he took a leave for a year. Nobody had done that at Microsoft before. And he comes back and Bill's like, I have a very special project for you. We need to compete with Steve Jobs because he's got this new company called Next Step or Next, and he's building a computer and an operating system and a graphical interface and object-oriented tools, object oriented, I know, object oriented.

And so, Jeff is given the task of merging a group in apps and a group in systems to come together who were kind of around the same time, around the same thing to make one thing. And it was going to be in this neutral zone of the company. Neither apps nor systems, and this was not some ragtag. The Systems group was led by Neil Kazen, the Neil Kazen that rode his bike in high school to Microsoft to build the Apple II soft card, whose initials were at the start of every Excel file. I mean, this was not a nobody. And our group was literally people in the tools group of apps. And one guy was on the Word team and he had quit when Jeff called him the worst teammate ever. And so I'm talking to Brad Christian, BradCH, about like, who is this Jeff guy?

Do you know him? Brad's like NFW. No way am I working for this guy. So the very first thing we do is we all go to the Westin for an offsite, which was really to heal Jeff because we all had to get along and it was like app systems, they just oil and water. They didn't get together. And so Jeff, unbelievable. He created this team that taught us how to listen to customers, how to refine, how to work together, how to set expectations that also had to work with the team that was building C++. That's how we got to Visual C++ the first time, which was an absolute breakthrough product. And the whole world ended up writing Windows programs in Visual C++ , all the commercial software was visual. And it was great. We left like little tombstones in the product of the Microsoft innovation classes so we would know when people used us.

So, I had a little, just to tell the story, I'm at a conference called WIN World in Chicago, and I go up to the digital equipment booth. They were still a company. They were big, it was important. And they have how big companies have these booths where they give space to partners. For some reason, this University of Illinois project called MOSAIC had a booth at WIN World. And there was this tall guy named Mark who was demonstrating this product called MOSAIC. Now this is in late 1993. I knew what this was, and I'll get to that in a second. But Mark is showing off. I had already known that it was built with the Microsoft Foundation classes. I found one of the tombstones in it, so I like the asshole. We all were. I walk up and I have my arms crossed to cover my badge, and I'm like, that's pretty cool. How do you like Visual C++? Just spontaneously asked that question. He looked at me, what are you talking about? Visual? What? Huh? Thanks. And I just walked away. I didn't need to see a demo. I knew what the product was, or it was a web browser being given away from the University of

Illinois, and it was at the very earliest time of it. And I wrote it, my trip report for Bill, which I'll get to. And I said, I think this guy's kind of a poser.

I asked him all about Visual C++, and he didn't know what I was talking about. It turns out I would later learn as we became friends, Mark and I, that he hadn't touched a Mac or a PC until 2000. He was on Unix his whole career. He worked in a, of course, I should have known this because he was in a physics lab at the University of Illinois Urbana-Champaign. And so I had this job, and this of course is Mark Andreessen, and Mark Andreessen — yes, Mark Andreessen — turns out was demoing for me his browser. And it had been written in IT++, but by the other part of the demo of him and Eric. And so, it was funny, but I only learned that at dinner in 2012. And so, I apologized in front of [Reid] Hastings, the founder of Netflix.

And so, I'm working. The work we did on it was just unbelievable. I mean, the leadership of Scott, it was all these things I dreamed about in 1984 working at Cornell on the Cornell program, synthesizer brought to life in a giant commercial product. It was unbelievable. I would go back recruiting to Cornell and I could see people using it. It was unbelievable. And so, Jeff tells me, there's this job that I need you to interview for, and I'm like, but I love it here. And he's like, no, no, it's all going to change after we ship. We're going to merge. This was a temporary thing. And he's explaining to me how corporations work. And so he says, I need to go talk to Bill about being his technical assistant. And so, I'm like, okay. And then NatalieY, NatalieY, who — oh, I should say, I keep saying the email names because of course that's how we talked.

But Jeff, his email name was Jeff, unless you were Bill, then it was JeffH because Bill insisted on having name and initial. And then we were starting to get the mail system where you could early Exchange and stuff like that. And Jeff had both Jeff and JeffH. But if you looked up JeffH, it said BillG forwarding alias to Jeff, because Bill and Jeff, they would not reconcile this difference. He was like, I'm BillG, this is SteveB, this is PaulaA, this is MarkZ, this is GordonL. You could be JeffH. And Jeff just wouldn't. And, of course I, SteveSi understood this. And so NatalieY talks to me and nobody knows what this job does. It turns out there is someone in it at the time, Aaron Getz, AaronG, who had worked on Microsoft Money with Doug Klunder and was a program manager, but I was a developer.

And Bill was very worried about how a developer could do this job because they don't understand the big picture or anything like that. So, I show up, I'm actually 20 minutes late for the interview. I was talking to Jeff about random stuff and after the meeting, just like, well, Bill was probably late, too. And I'm like, no, he wasn't really late. So, he rescheduled. I had another meeting. I am never late for anything. Everybody knows that. And so, I ended up getting the job. Knew Aaron, I talked to him. Nobody knew what we did. It was a weird job. Rich Brody had kind of done it. Jabe Blumenthal. The first one was Carl Stork, who went to college with Bill and ended up running developer relations parts of it and evangelizing DOS Windows stuff, plug and play with CarlS. So, Carl tried to

explain to me, well, I designed the user interface for DOS Word and DOS Spreadsheet as that job.

I'm like, well, I'm not going to do that. And so I get this job and I have to just figure out what to do. So, I'm just learning, helping, gluing people. There's a whole, I gone for hours about what I was trying to help do. But the big thing was this is basically starting in late 1993, early '94 and Chicago, which became Windows 95, is under development. Well, in February of 1994, February always being an important month to visit Cornell. That's when I visited, when I was in high school. I fly out to do my twice-yearly recruiting trip. Chris, Chris Whitt had signed me up to do job interviews. I'd show up. I love doing these interviews. It was great. So, I'm at Cornell staying at the same hotel, go to the same Kimball, B11 engineering, same, all the same stuff except it starts to snow and they're shutting the campus down, which they never really did.

It was bad. And the school, it's just complete whiteout. You can't go anywhere. Even the truck that used to do French bread pizza is gone. It was just the whole thing was shut down. So, I walk over to the computer place I'd worked in as an undergrad in the computer science building Upson on the basement, Upson before. And there's no one in it because no one can walk anywhere. And the guy looks up at me who's staffing it, and by then there were Next Computers and Macintosh's, all the VT 100s had mostly been taken out the terminals to the mainframe at the airport. And I say these, I actually out of my mouth come the same words that used to make me groan. Hey, I graduated here a few years ago, just want to talk to you. And I see the guy's eyes roll, and I have no self-awareness about how ridiculous I sound to myself, and I just proceed to ask him to tell me everything about it.

And he's like studying. But I noticed he's studying for computer graphics. And the book is Foley and van Dam. So Andy van Dam was on the technical advisory board for Microsoft Research Forever. And he's a legend. He invented hypertext, graphical program. All of the Toy Story people had taken classes with Andy and Major. He's a legend. And so I just say, "Hey, I happen to know this because he is my classmate. I noticed you're in the graphics class CS 417, you have Professor Greenberg." He's like, yeah, "Oh, I went to college with his son." So, Roy was a classmate. And so that broke the ice and he starts taking me on a tour of the facility and he starts showing me how students are using Macintosh's. And I'm blown away. They come into the room. They don't have to sign in like we used to, right?

They just pop a disc in. They get this menu called Bear Access The Cornell mascot's a bear. And they log in with their Cornell ID when I'm like, I was tguj@cornell.edu. And they get their names and it's like crazy. They check their mail. There's mail from professors. There's mail from other students in labs. And then they pull the floppy out, they leave, they print things and there's this thing called the internet that they connect to.

Now, I knew what the internet was, I'd been using it since I was in college. We used chat and FTP and all this stuff. I did internet with people at the University of Wisconsin to work on the synthesizer, but this was like with pictures and stuff. And I go back the next day and I'm watching the students pile in and do all this. It's mesmerizing. I'm trapped.

There's nowhere to go. I have nothing to do. I just spend all day. And I'm randomly talking to students who clearly think I'm some freak. Fortunately, the world was different so you could talk to strangers, and it wasn't crazy. And I was young enough that I didn't look like an actual threat. And I go back to the dorm, the hot truck, the food truck is back. I get that. I'm completely sick because it turns out after you're 20, you can't eat college food. And I bang out this giant memo describing everything I've seen called Cornell, and I call it Cornell.doc or CUNET.doc. And we had eight-character names. And the subject of the meant was CORNELL IS WIRED in all caps, like the new magazine, wired Magazine. I send it to Bill. Bill's like, you need to send this to Brad, to Brad Smith, sorry, to Brad Silverberg, BradSi.

And I send it to Brad and Brad's like, you need to send this to JohnLu, to John Ludwig. So, I send it to John, send it to Brad. John says, you need to send this to J Allard. So, I send it to J Allard, and J's like, oh, you got to read this. And he sends you back a memo. And his memo is the Embrace and Extend Memo about the internet, and it's called Writing the Next Platform is that the name of it? Windows the Next Killer App for the Internet. And it's about Windows in the role of the internet. And Jay turns out I go, as soon as I get back, beeline for J's office, go into J's office, which is Building 2 where the NT networking team was. And I look over and I see Henry Sanders, HenrySA, Henry and I went to college together.

Henry is the boss of the dev team on building TCP/IP for Microsoft. Nobody cared. At the time, Microsoft wasn't running it. Henry was my boss at the computer room. He was a year ahead of me. And I talked to Henry, and he's like, what are you doing here? And I'm like, well, I work for Bill. And he's like, uh oh. And then their boss comes over name escapes me right now who also went to Cornell, but much before us. He was one of the grownups that came over with Dave Cutler, and we're all talking, I walk into J's office, first thing I notice, he's wearing Puma Clydes, same as me. So, we are bonding. Immediately he tells me his story about working at Boston University on the internet, blah, blah, blah. Tells me what he's doing. Steve Ballmer told him, make this problem, go away. This problem means TCP/IP.

They had developed WinSock with David Treadwell and some other people who I knew David because he was friends with the recruiting people that I was friends with. Like Chris Wit. He was friends with Lynn Russell. And Jay and I are talking and I'm like, okay, we're going to have to do something big here. Go back to my office. And I just tell Bill, "Bill, I'm setting up internet in my office. We're going to have an offsite." Bill does the thing where he draws a calendar on his legal pad, turns it sideways. And he's like, okay, how about April 5th? I'm like,

okay, book the offsite. And I mail Dave Leinweber, DaveL and MSIT. It wasn't called that. That was called MSIT then. And I'm like, Dave, I need an internet tap. Dave rushes over to the office. Why? Because nobody was allowed to have those. Big deal. When I started you couldn't even get on the internet at all. They downloaded mail from the University of Washington twice a day. That was email. I was the only person I knew from college in grad school that got mail after hours. And Gordon was absolutely refused. Dave explained to me a big red cable came down from the ceiling. I was not allowed to connect it to anything else, all this other stuff. I had one of three internet taps at Microsoft. The other was in Dave's office, and the other one was hanging from the ceiling running ftp.microsoft.com.

And from that point, I'm literally, I have a Mac Duo, which is this laptop, and I'm demo-ing the internet to anyone who will slowly walk past my office. And because I was working for Bill, this meant huge people, I won't say names, but let's just say one of the people I demoed gave me a giant standup Jurassic Park lobby cardboard thing. Another one won't name names, but he had just done a bunch of commercials saying, you want to send an email from the beach someday you will, which is a big at AT&T- was doing demos for everyone, all these famous people that would come and visit Bill. And then all these people in Microsoft, Nathan Myhrvold and Craig Mundie and Brett, and of course everybody told, Rob Glaser, they all knew the internet, but nobody knew that it was about to be this giant tsunami.

And so we had the offsite, and I've got to say it was only like four weeks from the time I finally got back, talked with J and had the offsite. It was absolutely crystal clear that the internet was going to be big. In fact, Bill had done two years of, two times he had done context presentations called Information at Your Fingertips, which was vintage early '90s Microsoft. If you watch those videos today, any kid under 30 who had never heard of IAYF would just assume he's just demoing the internet. I mean, it was links and pages and hypertext. It was all done in a way that only worked with the latest version of Windows, and this just blew up the whole thing. So, we had this whole offsite, and it was super clear. Brad Silverberg was like, we're building a browser. We were going to do the Microsoft Network.

All of this became clear in April of 1994, and by the way, the offsite was held the day after Netscape was incorporated. It is poetic. I had put together a briefing book to teach the internet to people. It was this thing. I had to go over to MS Copy and hand carry it back because the shuttle drivers didn't want to carry it. It was so big, and it was testimony to so just how fast we could move. And then we had the offsite, I wrote up the notes and I was obnoxious about it with Bill. I said, look, Bill, this is what we're telling everybody, and I'm not trying to take credit. It was obvious. I was just doing the legwork. I said, nobody should be asking questions about the internet and researching it and deciding if it's going to be a big deal or not.

Our bet is on the internet. And I had taken the wording from Bill's 1991 Mail on The Future is Windows. That's all I did. I knew that was the first memo or 1990, the first memo I'd ever seen from Bill, and I just copied it. So, I remembered it. The only one I'd ever seen, and I just took all the wording about our future is this and it's going to involve risk and blah, blah, blah. So that went out and then we just had a sprint to get to August of 1995 and get all the stuff done that we did. And everybody has their own stories. Ben can tell you all about the browser. J can tell you about TCP/IP and networking. Brad Chase can tell you about distributing the browser. Russ Siegelman can tell you about the MSN Network and creating it. I mean, everybody was the Word team.

The Word team had already Peter Pathe, his email was Blue Peter, that was his nickname from college. Peter, who had done the TrueType team, was General Manager Wharton. He was already doing HTML when I found him, and they had already licensed code so they could make, because it turns out everybody was asking the Word team how to convert it. I went down and visited the PowerPoint team and they showed me how to convert PowerPoint decks to HTML because everybody was trying to do that. And we actually talked all about it. There was a Pizza Hut right next to the PowerPoint office down in Silicon Valley, and they were like, don't let anybody hear you. And you could hear people talking. I could hear people talking about the internet. People from Sun, from Apple, from Oracle. And so that got us just to April. Then the company was just working.

Steve had come to my office, got the demo, would send everyone from the field. There was a guy in the field, for example, who every month would put together all the white papers and sales materials and PowerPoint decks that the field needed, get them translated and put them on CD-ROMs and DHL them to [unintelligible] and Cape Town and Bolivia and all around the world by every month. And I'm like, why don't you set up a website and you learn, well, they don't have the internet in La Paz right now, or they do and it's 300.

We did all this corporate stuff. I talked to Lori Moore in support and Patty Stonesipher about making all of the product support stuff like email and online and chat. Everybody was doing it instantly. There was no mandate, there was nothing. And then we just had to sort of, Bill had to put a cherry on top because Wall Street was still worried. Netscape IPOed in August of 1995 — biggest IPO ever, blah, blah, blah. People didn't think still ... And so, we did two things. One, we did a giant story back then you could do a story with the magazine. And Business Week came and interviewed all the people I just mentioned, and we had this marvelous what the PR people called tick tock doc, which was this timeline of all the work we were doing in Business Week. And it started off with Embrace and Extend and all this stuff and in the throes of the trial and DOJ and all that, it was great.

It was positive, it was agile. We had done all this stuff. And so we did all that and Bill just had to write a memo to cap that. So that became the Tidal Wave memo, but it was like a year and a half later from all of the work that all of these people

did. And it was sort of the summary of the whole thing. And you know that because it just made it to the press instantly. It didn't show up on mini Microsoft or Spencer Kat or anything. Mitch just sort of handed it to them.

Mario Juarez:

So it's interesting hearing your timeline. I think it actually is a little bit different than a lot of the conventional wisdom, which was that Microsoft was maybe a step behind and maybe that was because there was the world's attention about Microsoft was really about Windows 95. Talk about that phase of evolution in the company, which was so hyper driven by the success the company was having with Windows 95 as a seminal moment office as something that had sort of solidified and then this new opportunity of the internet. Describe what was the company like in the mid- to late-90s?

Steven Sinofsky:

Well, the thing was I think that people, Microsoft had become dominant. I mean, the thing is Bill created the idea of a software company and then Microsoft just became the biggest software company and software, it still didn't make sense to people that it would be a business because they thought of IBM making computers that filled whole buildings. People loved their PCs, but you have to remember, have that in 1983, the year I started college, there were 1.5 million PCs that had been manufactured and sold on Earth, the whole of Earth. It was just barely more than the number of Apple IIs. When I started in 1989 at Microsoft, the PC run-rate worldwide was I think like 20 or 30 million units, if I'm remembering correctly. And so, this was not like a PC in every home. It was like a pipe dream. 5%, 10% of the houses had PCs on every desk who could afford that?

Plus desks were all three and a half feet tall and had no outlets. Where were you going to put a PC? And so we were seeing this incredible growth, but it was still fragile because people didn't really believe it. The internet made a bunch of people, particularly in the investment community, think that the next thing was the one that was really going to take off. What they didn't see was that the internet needed a reliable, broad-based, technically competent platform to put in your home and on your desk. And so the internet turned out to be the biggest opportunity for Microsoft just to sell PCs so you could get on the internet. And so that's why the Back to School and the Christmas 1995 present was a home computer because that was how you got on the internet. It is true. It was easier and faster and frankly better on Macintosh.

But very, very quickly everyone involved realized that focusing on Windows was just a much larger market. Macintosh was struggling, struggling, struggling in the mid-90s, and that's because they had relied on proprietorships. Well, the whole story, but they just didn't have, they were maybe 10% of PC sales. So if you were America Online and nobody was hooked on just having TCP/IP in a browser, you needed a service. And America Online, they had a Mac version first, but the numbers were all on Windows. And frankly, MOSAIC didn't take off until there was the Netscape Windows version.

But the company itself, there were just two things that are just so, so important. We were maniacally focused on being the best technologists and that comes straight from Bill. And it was just we had to know the technology better, write better code, faster code. We had to understand the architecture better than everybody else. That's how Visual C++ beat Borderlands. It's how Excel beat Lotus 1-2-3. It's how Word beat WordPerfect. I mean these products, you could look at all the reviews from that day and our products were just better. And the people that made them were really focused on that from the manager chain on down. I mean if you look who managed the Word team over time, Chris Peters was the dev manager of Excel and who worked on DOS 1 who Windows 1.0, Mouse 1, then came over to work on Excel, managed the Excel team, then managed the Word team.

I mean, it's like in the military, you want to look up the manager chain and see people had seen combat. Chris had seen all the software combat you could see at Microsoft. Jon DeVaan was the same way. And that was how the company was really built, which equipped it to see a tsunami of technology and deal with it. The other thing that we were, and this comes from Steve is and Mike Maples was we were focused on winning with products, not technology. And so we were focused on turning technology, the best implementations and use of the technology into something that you could do something with. And it turns out many, many companies exist that have great ideas for technology and just can't turn it into something that's with, that's ultimately what happened to Netscape. They couldn't find the product that everybody wanted. They had a much, much better browser than we did, at least for a while.

And many people thought that Word Perfect was a better word processor. No, it was just familiar. Word did way more stuff and way better with what you see is what you get, blah, blah, blah. Excel was just faster, just faster. You know Word - Dwayne Campbell, who was a leader on Word used to tell the story about Bill said scrolling in Word is really slow. This is DOS Word. Dwayne was a music major in college and one of the absolute, he and Jon were the two nicest people I met all my time at Microsoft. Dwayne was like, well, I'll make it faster. And he made it so fast that Bill was like, well, it's too fast now. You hold the page down and you get to the end of the document too fast. And so Dwayne ended up putting in a control over how fast you could scroll, and that was what made the company special.

And so of course when the challenge of the internet came along, take those two things. So what did we do? We made a better browser and we understood technically what to do. And then IE 3 was just good and it was just better Word was better, Excel was better. And so it was just a magical time for those qualities that were the right qualities that you needed at the time. And of course it just takes too long to get into here. But where Steve was just about to, or had just moved to the Salesforce and was overseeing all Salesforce previously had run Windows, blah, blah, blah, and he was taking us through the most important business that led to product transition that the company has undergone ever, which was the transition to enterprise. And that transition was



going on in parallel. So it turns out if we had all that support for architecture and building products, people want, once you pointed it at the enterprise and all the thousands of salespeople and support organizations Steve was building, that's what got the modern Microsoft going. And that literally defines 1997 forward. It's just unbelievable. That defines the Exchange product, SQL Server, Windows Server, Active Directory, the Office Suite itself, which launched on Windows in 1993. That's the whole of the company, and that's literally where it is today.

Mario Juarez:

Beautiful. I wonder if you can overlay for me, so these are such powerful, powerful anecdotes, incredibly important lessons. I have to believe there's a hundred principles that you operate by professionally to this day that you gained from that overlay where the company is today with somewhat parallel situation where back then it was the internet today, the company's riding the wave, driving a lot of leadership around AI. Can you reflect on what happened in that window, in that internet phase, the key lessons, the key learnings, the key warnings that you would have for the company as it engages in this new wave?

Steven Sinofsky:

So it's very interesting to try to project what happened during the internet on to say what's happening today with Artificial Intelligence. The company of course is in a very different position the way I interact with many CIOs around the world, but through a venture capital lens and startup lens today, I can actually see the difference. The interesting thing is I'll often meet a CIO who is my age and tells me or maybe a little younger and tells me, oh, I remember Visual C++ or I remember Windows 95. And it turns out one of the lessons from IBM who of course when I was in college, I worked for a defense contractor in the summers in Orlando, and all we talked about was IBM, we had a giant cluster of mainframes. This ran the Pershing Missile Project and Javelin Missiles and TADS, ADATS.

I have no idea. All these things we worked on. And the generals would come by all the time, and all they'd want to do is see a tour of all the mainframes, all our terminals and all that. That's all we talked about. COBOL, APL programming. And the thing was, those people all grew up with IBM. They were punch card mainframe programmers in the '70s who had just, and so they only knew IBM. And so what we did during the 2000s was create a new generation of CIOs to take the reins from those people, the client server people that the CIOs of today all made their earliest days writing .net in 2001 or dealing with Windows deployment. And so they are part of the Microsoft ecosystem. And so we didn't have that in the '90s when the internet came along. Steve was building that with the Salesforce.

We had to build those relationships, train those people. I had to go talk to all the CIOs of some snotty kid who had never used, I used a mainframe I knew all about. I actually used to tell all sorts of jokes about COBOL and writing H Assembler and stuff. That was a warming thing. Now you show up, you have to tell the same thing about did you have a sound card? Was it a sound blaster? Did you install Windows 90? Do you remember the Windows XP product ID

number from typing it in from the betas and stealing copies? And that's how you break through with the CIOs of today. They were all those people. So now the new technology wave comes along and instead of defaulting to wanting to understand what IBM was thinking, which is what we had to break through in the nineties, they just knock on the EBC and say, please guide us.

And that shows you the asset that Microsoft had built. That Steve had built in the '90s. Because all those people, their default is they're so comfortable with the lingo and the language and all the words. And so there's that to really build on. And I think of that as just super fun memories because it's like, wow, we wish we'd have had that. The lesson though, and it's one that I will say I see challenges is the first one about being the best from a product perspective, being the leader in technology and architecture and wrapping that in something that people can use in a very deep way. And I think if I were to suggest to people, that's what we need, of course, I have a thousand friends. I literally ran to a guy last night at dinner, comes running up, oh my God, oh my God, and gets all excited and sits down, wife and I are like, what's going on?

It just, oh, the best time of my life was working for you, blah, blah, that. It's wonderful to see, but you don't want to hear that. I don't want to hear people saying that. I want them to go and learn the technology and be the best at that. I know they don't work at Microsoft anymore, but I think that's the lesson is about we need to be the best and we need to be the smartest. And that's the challenge for today's Microsoft is to be that because they have, no one is going to default by somebody else. It doesn't matter how good they are. Like Microsoft has that.

Mario Juarez: When you think about legacy, what do you feel that your legacy at Microsoft has been?

Steven Sinofsky: My legacy - It's easy to get carried away with questions like that. I have been around long enough to know that executives and CEOs at companies, they have their time, they do their job, and the memory fades quickly. It isn't really, you don't think of it through the lens of individuals. I do. And individuals will think about individuals that impacted them. I used to say this to people, I'll tell this when I was a kid, and I had mentioned earlier when I was a kid, I used to, once a year or so, I'd go on a train into the garment center in New York with my dad. I'd put on my blue blazer. I was like eight. I'd put on my blue blazer and my loafers and go into the city. It was like going into Mad Men. And my father's boss was a guy named Max.

Max had the office. My father had a desk with everybody else, and I have the most amazing memories of Max. I mean, Max was just a guy and he was nice to me, and he was older than my father who was 26 or something at the time, or 28, 29 and Max. But to my father, Max was everything. Nobody knows who Max is now. But Max was my father's mentor, so that meant the world to me. And so to me, there's no legacy that anybody will know of. I hope that there are people who remember me for what I did with them, just one-on-one or as part of a

team. And to me, the happiest that happens to me is when I happens more than once, which just makes it even better. Someone comes up to me, I won't sometimes recognize them because we're all older now. Laura Jennings, one of the, was the original marketing person on the first bundle of Office for the Mac with Stephanie LeBresco and some other people.

Laura just moved into our building and I'm in the parking garage and I am getting out of the car and I'm wearing some Microsoft thing. I don't know what this is just like a month ago. And this woman comes up to me and starts talking to me and she's like, how long ago were you at Microsoft? And I'm like, oh, a really long time. It was a young woman. I said A very long time ago, no, really how long? And I told her, and she's like, well, do you know? And I'm like, Laura Jennings, and I thought I was talking to Laura, but my head did this bizarro thing because Laura is my age actually two years older than me, and I'm talking to her daughter, but her daughter is the age of Laura when I worked with Laura. So that's why I think I'm talking to Laura because they look exactly alike. So I'm super confused.

But you run into all these people and she will go ask Laura and there'll be a, oh, we both each remember each other fondly. And all the work Laura was doing on Exchange Server at the time I was working for Bill, we were trying to create Exchange and Active Directory and get the teams to work together and all this stuff. And so for me, running into people where, I mean the highest compliment someone can say is, I've been in the tech industry X decades, those five years working on Office 2007, Windows 7, were the best of my career. And the fact that I can hear that in a yoga studio in Palo Alto where somebody will come up to me, it's amazing. And that's all I could ever possibly ask for. Personally. I have no interest in being written about in books or things like that.

I know enough now to know all that stuff is written. It's always told through some goofball lens that isn't what we lived. And I know that because I just wrote 900 pages on my own view of the history of Microsoft in "Hardcore Software," named after the recruiting brochure that got me to the company. And I read all the Microsoft books again, and first the books only cover from the formation of the company until about through the trial. And they're all just about how evil the company is. And it just wasn't that. And so the legacy of the company that I am most fascinated by is, and people don't recognize this, but before Microsoft, there was no substantial software industry. There was not a unifying force that brought computing together. There were dozens of little halt and catch fire fiefdoms building software. And what Bill did was democratize computing for the masses.

He brought low price, easy to access computing, which in turn brought programming to whoever wanted to do it. Those early days of Microsoft, most people weren't computer science majors because most schools didn't even have the major. Math majors, music majors, chemistry majors. We just all fell into computers. And that then is what created this whole, now of course, people quibble over the mainframe had its world and all that, but this is a world that

went from thousands to tens of millions. The fact that even when I was working on Visual C++, there were millions of programmers in the world. The mainframe world was never going to create millions of programmers. The Unix world was thousands. It was never going to create millions. And so that's the legacy of the company is just democratizing computing. And there's all of these very small details about the OEM business and standardized hardware platforms and the notion of APIs and how you create the base level software and enable and have partners. I mean, Bill sort of pioneered this whole notion that to truly build an ecosystem, which is what people academics call Windows and Office and the PC. You have to let the people out that aren't. You make more money in total than you make. Then you're a healthy ecosystem. And that didn't exist before. IBM made all the money in computing before Microsoft. Microsoft makes a lot of money in a trillion-dollar IT world. So, that's the legacy of the company.

Mario Juarez: When you think of your experience, what was meaningful? You look back at the experience that you've had now you've got the luxury of a bit of hindsight. From a personal level, what was meaningful about your being at Microsoft?

Steven Sinofsky: There's no doubt what was meaningful for me absolutely starts with the people because it's hard for today, nobody at Microsoft today or would understand. There was once a snowstorm, the snowstorm you'll remember of 1991 was that it? The whole of the King County, the Tri-County area was shut down completely. I lived on Capitol Hill with Pearl Jam and Nirvana and everybody else. I was not getting home at all. It turns out nobody was getting home. We just roamed the hallways. We all walked over to Safeway, got loaves of bread and food, walked back to Microsoft, took advantage of the free drinks. All we actually had were free drinks and snack machines, and of course, none of us had coins.

And we talked, and it turns out we did that without the snowstorm. I remember Rick Powell, RickP, was also, he was the original developer who made Excel cross platform on Mac and Windows. Rick was another one of these programmers who just... his brain thought in code, some people's brain thinks in pictures, some people's brains thinks... Rick's brain was just code. And Rick was the office next to mine, and I can countless times we would just sit and talk at night, and that was the company. The most fond memory I have was Scott Randall and I of building products. Scott Randall and I working on his — what then they became whiteboards — of how Visual C++ should create programs and make it really easy. And we had finally worked out this whole picture. I mean, it's mostly Scott, but we'd worked out this whole picture. I did it in PowerPoint that night, and I drove back to Capitol Hill where I lived, and there was a Kinko's, a FedEx on the corner that was open all night, what they were back then, and they had this printer that could print posters, and it was like \$60. And I printed out the PowerPoint version of what we had drawn on the whiteboard, which just ended up in the manual for how the whole system worked.

It was the most amazing. And then just three years later, I'm online at the hot truck at Cornell and I hear these kids talking about their class using Visual C++, and I'm just like, Hey, I heard you guys, you just to have to wait for your food out in the frigid cold. And I said, you're working on, you're using C++? They're like, yeah, because a new language. And I'm like, yeah, I work on that. Do you use C++ too? No, I worked on Visual C++ the product at Microsoft. Which part? Well, the three of us did the Microsoft Foundation classes. No way. And the guy, he's like, wait here. He ran back to his dorm, which I knew these dorms. Well, it was where I was a resident advisor for, I lived for four years in these dorms. Ran back to his dorm,

I could see him going into Bolt Hall. And he came back with his copy of the box and a pen, and he wanted me to sign it to his dad who was in the software industry. It was unbelievable. I mean, every one of us have stories about being on an airplane of telling, and that's so much different than when I started the job in 1989. I'm back in Florida with my mom. My father had passed away earlier and someone was asking me, what do I do? Where do you work? I work at a software company in Seattle, Washington. Seattle? Isn't that farms?

And I'm like, no, it's kind of a big city. Boeing is there Weyerhaeuser, huh? What's software? Now, I don't expect all the Yentas in Miami to have known what software was in 1989, but still it was a bit much. And so for me, the legacy of the company is just, it created all of this. And when people get all cynical and they talk about how Microsoft wasn't the first to do X or the first to do Y or didn't invent X or didn't, they're missing the point completely. Because what Microsoft did was what all companies do. I mean, Kellogg didn't invent breakfast.

We took all of the technologies that were available and chose to do a certain thing with it. And what Bill did was just figure out an important part of the equation, which is how do you make enough money to pay salaries and build a business, and then how do you make it so other people can go build a business? That's an invention in itself, and that was the legacy of the company. And yet it starts from that kind of snotty hobbyist letter. You should pay people for software, but he was 19, 18. That's what you do. I think that legacy is just, it's everything. When people today ask me what it was like, I finally, after five years in Silicon Valley stuff going back and forth to Seattle, I finally have a way of talking about it that I think some people think is a bit much, but I don't care because it's good for me, which is when I was growing up in Orlando, there were all these people that had worked on the space program.

My father's store was here. Right next door was a copy store that used to be a kind of big business to have a place with copy machines and you'd bring stuff to get photocopied print station or whatever. It turns out this guy, which my father got to be friends with because they were business neighbors, he worked in the control room at Kennedy Space Center before he opened his copy store. He was on the panel just like the right stuff. He was one of those guys. He had a picture of himself up on the wall sitting in front of the screen. And whenever I would

talk, I used to work every weekend at the store and whenever I'd talk to him, he would tell stories about then. And they were creating space travel. And it turns out, just by pure luck just a few years later when I was working at what I affectionately call the missile factory, which was Martin Marietta, which is the company that made the space suit, that the guy freeze floats out in space, they also made all the missiles that were used to end the Cold War.

My boss also had one of those jobs. Bruce Dressler worked on the radios at Kennedy Space Center, and he used to tell me all the stories about the astronauts and all that. And now I know the equivalent of working at Microsoft in the nineties was working at Kennedy Space Center during the space race. It's the same thing. Yeah. We didn't land a man on the moon. We did put a billion computers out there. I get no one's going to ever believe there were the same. But they didn't invent rockets. They weren't the first, but they did. They put the whole thing together. And we didn't invent computers at Microsoft. We didn't invent, but we put the whole thing together and it's just remarkable. And there won't ever be anything like that until there is. And I've talked to all the original iPhone team and all those people, I know them, they kind of did the same thing. But they also worked for Steve Jobs who had done it several times before. And so we could relate on that level. I talked to the people who worked on Next and then the iPhone. It's the same emotion. It's that the number of things that people do that go from zero to a billion is very small.

And that's the thing, because the next big thing in technology is just going to replace something that the whole planet uses. That's going to be a wild invention. It literally can't be imagined right now.

Mario Juarez: What does it take to catch that wave?

Steven Sinofsky: I don't think we're on the cusp yet. I think catching the next wave from zero to 7 billion, it's going to be different. It's going to be characterized differently. There's nothing structural. For example, what the phone capitalized on was that half or two thirds of the planet had not yet had the opportunity to use a personal computer. So the thing that came along, which was really like the Nokia phone turned out to be a device that they could get access to, and it didn't require continuous electricity. It required only a few poles, not like a whole internet kind of thing. And so the next thing is going to be so different because everyone's already connected together. Everybody literally, everybody has a smartphone. So it's going to be very, very different. Just like the original PC, it didn't replace any mainframes. It didn't replace the computers that people were using already. It just was everybody else who wanted a computer got a PC, and then the mainframe people finally said, fine, and then came Windows Server and then Linux and stuff like that, and they caved in. And so it'll be a different category of thing. Now, could it be just some software that everybody with a phone, whether it's Android or iPhone, get, or could it be some software that everyone connects to that runs in one particular cloud, maybe.

Mario Juarez: Any final thoughts?

Steven Sinofsky:

I just want to do this one bit. One of the things that's just super interesting about this transition we made from being tiny to being medium scale aiming for the enterprise to being enterprise is that companies develop this fear of change and risk. You look at everything through the default is no. And so I think one of the moments that the office team that we were working through in the mid-2000s was Office had become such a fabric of the workplace that there was this huge fear we were going to screw it up. Like Steve, when we released Office 97, we changed the file format, which was what you did. Every release of Office changed the file format. It's just that for Office 95, we didn't, because we didn't really believe when Windows was going to ship. So we just did a few little things around the edges and we didn't change the file format, the fastest way to make it release hard to predict.

We changed it in Office 97, the beta comes out, the trade press is going bonkers, causing all these problems. Steve, I'm in the cafeteria in building 17, and I hear this "Sinofsky! Sinofsky!" and it's only one person who does that, and it's Steve, and he's bellowing towards me like a linebacker. And the hall cafeteria gets quiet. They all see this happening and nobody knows what he's going to do to me. He's like, you changed the file format. Why did you change the file? You're killing me. You're killing the field. You can't change the file. And this just went on. It was awful. And that was a pivotal moment for me. But we had all these reasons, whatever. But the thing is, companies, it would've been very easy to just mandate, no, we're never going to do that again, and blah, blah, blah. You can't shackle yourself like that Office was competing with these free versions of Office who were just copying us and people were using Office, but they didn't know how to do anything.

There were all these things they want to do that the product did. So we embarked on this complete redesign of the product, and just as you'd expect the equivalent of Steve bellowing, which turns out to be Orlando Ayala, you can't do this. They want the old way. I'm like, we can't survive as a business by always just doing what we did before. And so it's this unbelievable ability to take a risk. And I could have tapped into one two energies, Steve yelling at me, or in seven, eight years earlier about not changing the file format or me fighting with Bill over putting the paperclip into Microsoft Office 97 in the first place. And to me, Microsoft is the place where you can put the paperclip in. Microsoft is the place where you take a step back and you say what the product needs now is a complete redesign, even if that means some people are going to complain.

And so we did that and it just smoothly sailed through because we did it well, we did it right, we did it with purpose even though it wasn't listening to customers. And those listening to customers is like such a deadly phrase because it just means you're not going to change. There's no customer who wants something new until they buy it from a competitor, which is always how it happens the next. So the next technology wave that comes along is going to be someone who's not listening to customers that they all start using. That's what the web browser was. Nobody was asking a web browser, nobody was saying how a web browser should work. They just started using Netscape.

And if you are too busy listening, you're never going to do something new. They're just not going to tell you anything new. And if you do something new and they resist, they're just doing exactly what they're supposed to do. That's exactly what customers do is put up a fight over anything that's going to take them time and energy and money. And so that it's a very, very special company that can take something new and do it in the new way. And that was what we did with Visual C. Nobody, when we did Visual C++ developers absolutely didn't want a Windows development environment. Just didn't. Nobody wanted a Windows Word Processor. Everybody wanted to use 1-2-3. Nobody wanted the graphics. Bill's 1990 mail that said The Future is Windows was about doing something that nobody was asking for. The Mac was failing when he said that. Failing. And so that to me is about whatever takes over, if a big company like Microsoft, like Google, like Amazon, like Apple ends up owning the next thing, it's because they did something that customers didn't want until they started using it from somewhere else.

Mario Juarez: Awesome. Honestly, I could sit it for hours and this has been really great.

Steven Sinofsky: I'm good. I feel like I've done this as much as I needed to in life.