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An entrepreneur, investor, business leader, and rocket-scientist, Sylvia Acevedo is the author of *Path to the Stars: My Journey from Girl Scout to Rocket Scientist*, which tells the story of her journey from a small town in New Mexico to NASA's Jet Propulsion Laboratory. Acevedo most recently served as CEO of Girl Scouts of the USA. In this conversation with Stanford professor Tina Seelig, she shares how some important early lessons in perseverance built a mindset that allowed her to excel as both a scientist and an entrepreneur.



Transcript

(upbeat music) - Who you are 00:00:04,043 defines how you built.. Today we are really delighted to welcome Sylvia Acevedo to ETL.. Sylvia is an entrepreneur, an investor, a business leader and a rocket scientist.. She wrote a book called "Path to the Stars: My Journey from Girl Scout to Rocket Scientist." I love that title, that's just a great title.. Her book tells the story of her journey from Las Cruces, New Mexico, to NASA Jet Propulsion Laboratory, and then into executive positions in Apple, Dell, IBM and other leading companies.. Then she joined the Obama administration and was the commissioner at the White House for an Initiative on Educational Excellence for Hispanics.. Really, really impressive.. She was most recently the CEO of the Girl Scouts of the USA, which supports more than 2 1/2 million girls worldwide and generates over \$800 million annually from their iconic cookie sells.. Pretty exciting.. How many cookies did you eat Sylvia? - Oh my goodness, hi, Tina (indistinct)..

00:01:10,620 Really great to see you.. - Yeah, we're really delighted to have you here.. 00:01:15,130 So I wanna start out by talking about your remarkable career path.. You were one of the first Latina students at Stanford to earn a graduate degree in engineering, and then went on to careers at NASA and Apple and Dell and Autodesk, and then the White House.. And of course, you also started a couple of companies yourself.. To what do you attribute your drive and success? - Well, thanks, and it's really a pleasure to be here.. 00:01:41,710 I'm really grateful, I had amazing teachers.. I was a product of Head Start.. I was in one of the first pilot programs for Head Start so I'm so grateful for that.. So early childhood literacy getting me off on the right step..

Libraries, love those public libraries.. Before the days of search engines, public libraries were it, and I was so curious about the world and I read as many of the books as I could.. It was a small library, so I think I read every book in the children's action.. And then I'm really grateful for my teachers.. I had teachers who were really supportive of me and believed in me, and then also that Girl Scout experience that really taught me how to create opportunity and also one of the greatest sales techniques that I learned from the iconic cookie program as well.. - That sounds great.. 00:02:31,100 What did you learn about sales from selling cookies? - So first is, when I grew up, 00:02:37,800 my family, we really lived paycheck to paycheck and sometimes we didn't even have money and we had to go live with family members.. So it was tough, and we also at times lived on the roads.. So we really didn't know how to create opportunities.. So one of the first things I learned in Girl Scouts was how to create opportunity..

Because I really couldn't afford to be in Girl Scouts when my troop leader said, "If she can, you got to sell, for everything you wanna do, you've got to sell a lot of cookies." That was a really large number of cookies I had to sell, so she taught me how to create opportunity and make your dreams come true.. So first you set that goal and then you break that goal up into smaller increment.. And then when you start working it, and if you need help, you ask for help.. Now that sounds simple on everyone who's on this call.. You know how to do that, otherwise you wouldn't be on this call.. But to somebody raised in living paycheck to paycheck or near poverty, you don't know how to break out of that cycle.. So learning how to create opportunity, that was huge, how to make your dreams come true.. And then the other thing, and I've used this my entire life, is never walk away from a sale until you've heard no at least three times.. - Oh, that's really important.. 00:03:52,200 That's great..

- It was because I grew up in a very traditional 00:03:58,150 Mexican household and children weren't supposed to speak first to adults.. So that's hard to sell cookies if you don't speak first.. And so, my troop leader gave me that advice.. And so the first time somebody said no to me, I just stood there in front of them.. And then I said, "Is there anybody else that might want to buy cookies?" And she looked at me and she said, no again.. And at that point, there's a thought bubble over my head that says troop leader, Mrs.. Provine says, never walk away from sale until you've heard no three times.. So I asked again, anybody's there you would make if you bought some cookies and she (indistinct).. But it taught me persistence, resilience.. And I use that going forward, I use that when my band director wouldn't let me....

I played timbal, I played the drums.. I was first chair, he wouldn't let me march with the big Timbale drums because I was a girl.. And I said, "Well, that was my first no.. Why else can't I?" And he said, "Well, they're heavy." And I said, "Okay, so you don't think I'm strong enough." So then I worked out, worked out, worked out, worked out so I got strong enough so I could carry those tamales.. So even at that young age, I began figuring out, how do you get to that yes.. How do you overcome the obstacles? And that if you're an entrepreneur is an important skill to know.. Is how do you find common ground, how do you work around the obstacles? - I think this is a really important point.. 00:05:23,005 Is that learning how to sell was a very pivotal skill in your career that you learned in Girl Scouts.. But I'm gonna guess that there are other skills that are consistent across all the roles you've played.. And I'm curious what, because you've played so many different roles..

Whether it's in the White House or starting a company, or in these tech firms, what is the skills that you found that were consistent across all of these different roles? - It's really important to start off with clarity 00:05:49,370 about what you're trying to achieve.. And especially as you move into leadership positions, having people understand what it is you're trying to achieve.. Now, that sounds simple, but what I've found when I've taken over departments or organizations is being very clear about what it is you're trying to achieve.. So communication of the goals and the mission of the organization is super important.. The other one is teamwork and working with others, the whole collaboration, that is so valuable.. And then also getting people to work with one another, that whole cultural aspect, that's really, how do you treat one another? How do you respect one another? Those things are skills that stay throughout.. So leadership, persistence, resilience, you've got to learn how to manage the ups and the downs.. Sometimes when everything's going great, you're like, it's always gonna be like that.. And actually then with business, it all goes through cycles.. So being able to manage through that is also so very key..

- I'm curious about what differentiates 00:06:52,680 you from other people.. Because I love the fact that I read somewhere, that it was doing stargazing as a girl when you run the Girl Scouts that sparked your interest in space.. And I'm curious what differentiate you from other girls who look from through that same telescope.. What was it that made you open to the possibilities that.... and everybody else didn't necessarily see the same possibilities? - That is a wonderful question.. 00:07:23,640 And lucky for me, my troop leader sat next to me and she's the one that pointed out the constellations.. 'Cause otherwise I would have thought they were just twinkly lights.. But later she remembered that, and so when it was time to earn badges, she encouraged me to earn my science badge.. And frankly, I wanted to earn a cooking badge, like all my friends, which I ended up doing as well.. But I also earned that science badge and she encouraged me to do it around space..

And so, when I did it around space, I decided to make an SDS rocket.. And I'll tell you, I failed.. I failed five times, but I kept going at it.. That all girl environment, a teacher wasn't saying, oh, I guess you're not good at that, or this is just for boys.. We're trying to figure out how do you problem solve? How do you figure out, what do you need to change to make it successful? Finally, on the sixth time, that rocket went into the sky.. And I remember thinking I can do this.. I can do science, I can do math.. And that was incredibly untraditional, but I had that confidence.. So I began taking more math and science, and I started doing more math problems like the teacher would assign the even and I would do the even and the odd.. And any kid, when they're doing something and they get better at it, they like doing it even more..

And the more you do it, the better you get, and I got some good at math, I became a rocket scientist.. So I think that early example of overcoming obstacles, problem solving, getting that confidence, and realizing that I could do this, that confidence stayed with me and is still with me my entire life.. - I love that story.. 00:08:59,960 And I think that's also really interesting how one person in your life can say something that changes the trajectory, this person who said, "Why don't you do the science badge?" Just give, it opens a door for you, and once that door is open, and I think it's important not just for the students who are watching as students, but to think about what is the messaging they give to other people? That we all can play that role of opening the door and helping other people see the possibilities in front of them.. - Absolutely, and I know as a mentor to many 00:09:33,450 and reaching out to so many kids around the country, it is so important that you are positive, that you're encouraging and that you help others see the possibility that is within them.. Because we have so much limitless potential, and it's so important that you really inspire others and to really ignite that passion within them.. Because everyone has that feeling of, I would really love to be doing that, and maybe they don't share it with others, but if they see that you believe in them, they begin to believe in themselves as well.. - So I'm super curious about the Girl Scouts.. 00:10:08,810 I think I was a Girl Scout for about five minutes.. So think of all the things I missed out, you've been in the program since you were a little kid and ended up becoming the CEO..

What has changed about the program over the last decades in preparing young women for leadership wise? - Well, even from the very beginning, 00:10:26,090 the founder, Julie Gordon Lowe was really interested in science and STEM.. So some of the first badges were electrician, pilots, construction.. So that has stayed in, but it ebbed and flowed throughout the decades.. And in the last 10 years, but even most recently, a really renewed focus on science, technology, engineering, and math, never

losing sight of the great outdoors.. As well as leadership skills and clearly that iconic cookie program is launched so many entrepreneurs.. I can't tell you how many business women I meet that have told me, "Oh my gosh, I got my start selling cookies." Or they'll make sure that I know that they were the top cookie seller in their area.. So those kinds of skills have stayed, but you'll see, especially when I was there for the last four years, we really had a renewed focus on making sure that we included the outdoors 'cause if you think about the outdoors, the first S in STEM, science is the great outdoors.. And I really wanted girls to put down their devices and wonder, look out at the sky, wonder about what does it.... Use all your senses when you're outside the crunch of the leaves as you're walking, the smell of the air after the rain, use all of your five senses.. I like to say we're not human doings, we're human beings..

And so that S of science was so important, especially to realize it in the great outdoors.. But all the others, so many of us are living now with our mobile devices or electronic devices.. And it's so important to be able to be the creators and the designers, not just the users of technology.. So really it's a huge appetite for learning all about that in Girl Scouts.. In the last year, 2019, over a million STEM badges were earned.. And in cybersecurity, over 180,000 badges were earned.. Over 10,000 badges a month were being earned in cybersecurity.. Hacking, malware, password protections, all sorts of great devices and ways to learn about cybersecurity.. - So I am curious, is it necessary to still have 00:12:40,682 a girls-only program? Shouldn't be skills be taught to everyone (mumbles)? How do you think about that? - We're talking about children, 00:12:51,805 so first of all it's kids 5 to 18.. In addition, really trying to learn something in a non-traditional way is really challenging for a lot of girls to get outside of that space..

Now, I do realize if you're thinking of a bell curve, I was probably on the really edge of that bell curve.. But if you're trying to reach the grand majority of girls and getting them interested in STEM, you have to do it in a way that is interesting to them, builds confidence and then builds on the competence.. And really designing so much of the programs around how girls learn and lead, which was a big focus at Girl Scouts.. We had a lot of researchers that focused on that very thing.. So I'll just give you a quick example.. Teaching malware and networking.. If you think about how are you gonna teach seven and eight-year-old brownies malware networking in a way that's interesting and relevant to girls? Well, one of the first things I did is get girls to sit in a circle.. Turns out the girls love to sit in a circle, especially seven and eight-year-old girls and talk.. Then we gave them a ball of yarn and they pass the ball of yarn to one another, so that every girl got a chance to get the yarn.. So right then in just a few minutes, you've created a physical network..

And then you demonstrate that one of the girls on the network had a virus.. And even though she didn't talk directly to every girl, because they're all connected on that network, which they can be demonstrated in the ball of yarn, they can see how that virus spreads to all the girls.. So in a very short span of time, you were able to get the girls interested because you were doing something they like to do.. They were able to be confident 'cause now they understood it, and now they're wanting to be competent.. Now, things like malware, physical networks that doesn't really intimidate them.. Imagine all the programmings being designed like that around how girls like to learn and lead, then they truly get interested.. And that's why you over the last few years, just the tremendous spike in the girls' activity levels in STEM, because all of those programs were designed in a way to get girls interested.. Then confident, and then competent.. - I love that.. 00:15:05,030 Actually, I think that's a really, really interesting example of starting with just getting a hook, finding a hook to get someone in..

Get them curious and start to feel like they feel like they have some confidence that they understand at least the frameworks.. And then they say, okay, now I'm gonna build my competence.. I'm wondering, we have a bunch of questions that are flowing in, so I'm gonna start with some student questions.. This one I'm gonna read.. It says, well, I find entrepreneurship very exciting.. I'm wondering if I might get caught up in working too much and forgetting about my values and what makes me happy.. How do you find balance? So the balance in your life, I'm thinking both work and rest of your life, but also in terms of having your own values lead you versus bringing your venture to some successful outcome.. - Yeah, it's really important to have your passion 00:15:56,731 in line with your priorities, so that is very key.. So if work-life balance is very important and you're really passionate about something, you've got to really figure out, how could that be expressed in that particular venture or idea? Now, I will say that when you're starting a company, it does take a lot of time.. And it's really hard to just say, okay, I'm only gonna do this from 8:00 to 5:00..

You're gonna have to have partners, other people who are going to be supporting you along the way.. So that you can also carve out time for, let's say, it's just your family or making sure that you're gonna work out or staying in shape or whatever.. So it's very clear that you've gotta have those things very focused that you're saying, I'm gonna have this, I'm gonna carve out the time.. But realize when you were starting a company, I'll use a rocket example, so much of the fuel is used in the initial launch.. And so, it does take that.. It does take that concerted effort.. So maybe you say, all right, during this time I'm going to allow myself to be very dedicated and minimize this other aspect of my life.. But then I'm going to then figure out when I can start incorporating those things back into my life.. Actually, I think that metaphor is beyond brilliant Sylvia.. That is just so brilliant..

The idea is when you're launching a rocket, I love it.. Of course, you came up with that.. When you're launching a rocket so much of the fuel is burned up at the beginning.. The idea is, to get escape velocity for any endeavor, there's an enormous amount of effort that goes into the beginning.. And that might be something you can tune down later, but at the beginning, if you don't do that, you're not gonna be able to be successful.. (indistinct).. Yeah, exactly.. So based on this, we have a number of people that ask questions about what was it like working at NASA? What sort of projects did you do at JPL? So maybe you

could give us a little bit of an insider's look at that experience.. - Yeah, that was fantastic.. 00:18:00,640 One of the things is when you work at NASA or the Jet Propulsion Labs, on any of those missions, Christmas or that great holiday season, the gift that keeps giving, is when your spacecraft is going to be near its target..

And so, I got to work on two missions of Voyager 2 and Solar Polar Solar Probe, which got renamed to Parker Solar Probe.. But the Voyager 2 was going by Jupiter right when I joined that mission.. That is like all the holidays in one.. But then, we didn't all have personal computers and it was the first time we are getting to see Jupiter and its iconic moons up close.. So the pictures you have of Jupiter were from that Voyager 2.. I remember they would be broadcast, streamed live, and you didn't wanna miss a moment.. So we slept there 24/7.. I remember sleeping in a sleeping bag and being in the cafeteria area 'cause that's where they had all the screens so we could look at them.. And it was just so amazing to see Jupiter up close, that big red dot.. I was assigned to work more on analyzing a lot of the data that was coming from to its moons, Io and Europa..

So just such an exciting time of really doing a lot of data analytic work.. But also being caught up in that moment when the spacecraft was going by Jupiter.. Then the next mission was the Solar Polar Solar Probe which is back then, it was pretty amazing to think about sending a spacecraft really close to the sun only 4 million miles.. So that seems like 4 million miles is really far, but if you think about it right now, if you're thinking about a football stadium and we're at one end zone and the sun's at the other end zone, well now this spacecraft is gonna go all the way down to the four yard line.. And so, you begin to think, wow, what kind of equipment do we need.. What kind of materials to build the spacecraft so that they don't melt? All the nuclear wind, there's just getting hit by meteors.. So how do you solve for that? So some of the material that was needed wasn't even created then.. So that's an amazing aspect like, okay, we wanna do this, and we've got to find some material that can withstand these kinds of temperatures.. So I love that because that was an experience of thinking as big as you could.. Just wonder..

Because you had to think about as you're designing this aspect, this mission to the sun, what do you need to be thinking about? And the big, what ifs, and I loved that.. Because it really stretched my brain and all of us were really like, what else? What aren't we thinking about? How else could we consider this? What are some of the other things that could be impacting this? So I just really remember that experience as just being amazing, because of how it really enlarged my thinking, made me really understand the universe of possibilities.. And I really enjoyed that time.. - It sounds wonderful.. 00:21:15,870 Now, we know that NASA, JPL is, when taking on these super hard challenges, sometimes they don't work out very well and you end up with failures.. We have some questions about this, about, how do you deal with adversity and failure? And whether it's personal or professional, organizational, how do we teach people to be resilient in a situation where you have failure, and you really need to figure out how to pick yourself up after things don't go as you hoped, especially when there's a lot of risk? - Right, it's important to try to plan as much as possible 00:21:55,571 to minimize that.. But realize that to be successful, you are going to fail.. And if you're always successful it is almost as though you're not stretching yourself enough.. They always say that it's like if you're hitting the bullseye every time you got to step back away from the target.. So understanding that if you fail, failures, I like to say that failure is first attempt in learning..

And so, to really say to yourself I failed doesn't mean that you're a failure.. It just meant that at that time, that didn't work out.. So then you figure out why didn't it work out, what could you control, what couldn't you control? If you think about the year we've been living in 2020, there were some things that were frankly just out of our control.. In other times, that isn't always the case.. But it's so important when you're trying things and they didn't work out to take some time to figure out why they didn't.. And I will say that is another thing that I have done throughout my career.. Is after we've done anything, even if it's successful, and also if it's not been successful, if it's failed, we always say, okay, what went right? What went wrong? What could we have done better? Because you learn from that, even the most successful activity event, you've got to take that moment to go back and figure out what went right so you can figure out how to make sure you do that again.. What didn't work as well as we wanted, so you can work on how do you fix that? And then what would you like to do a little bit differently? I always instituted that and that was just, I was surprised how many people just do something, oh it didn't work out, and move on to the next, without taking that moment, really first attempt in learning, of learning from that experience.. - Yeah, I'm a big fan of thinking of failure as data.. 00:24:00,100 And if you don't mind that data and analyze that data, it's a huge missed opportunity..

So I love the way you put it of, the acronym of failure as first attempt in learning.. - Yeah.. 00:24:11,675 - Great, I'm gonna repeat that, thanks.. 00:24:14,544 So really curious to hear about your time at the White House.. What an incredible opportunity to work in the Obama administration on such an important goal of focus on educational excellence for Hispanics.. How did you get that opportunity, and can you tell us a little bit about it? - Yes.. 00:24:35,630 I was in Austin at the time and I had just been a successful entrepreneur who just sold this company, Viva Technology, and I had options.. and I could have gone back to technology at that time, but fortunately for me, somebody had encouraged me to mentor and tutor a kid in a title one school.. And at that moment, I learned that that girl needed a lot of work on dental hygiene, and I went to the teacher, I was irate like, how could you not help this child? And she said, "Sylvia, this entire classroom, in fact, if you have 35 bucks, this kid broke his glasses and needs to get them repaired and doesn't have the money." And what I realized from that moment was that teachers are amazing and they excel at the one-on-one or the one-on-few, but the demographic changes were happening so quickly.. And also, the healthcare and economic disparities were also growing so quickly that their solutions just didn't scale to the size of the need..

And I remember thinking, you know what, I'm not an educator.. I'm not great on the one-on-one or one-on-few but I know how to scale.. That I can deal with.. And when I learned about the need, for example, in central Texas, 11,000 kids needed glasses.. They didn't have them.. And yes, they could get vouchers, but the challenge is it was really tough to get the vouchers, and then when they went to get the glasses, the business, trying to sell up and it was just a real challenge for the families to get the glasses.. And I realized like, how can a child learn if they can't even see, and there's 11,000 kids.. And there were great organizations that wanted to support, but they wanted to support with 10 glasses or 100.. I'm talking 11,000 glasses, which required a system's solution, which we provided.. We got a mobile van donated, we made that into a vision lab where we actually created glasses on the spot..

We got volunteers, and then we had optometrists also volunteer their time, and they would go school by school and make glasses for kids.. And it is one of my most heartwarming memories of having a kid who put his glasses on and looking up at his mom and smiling, and he said, "You're beautiful." - Oh, wonderful, that's so wonderful.. 00:26:59,703 - I know.. 00:27:03,380 And so then I also discovered that kids didn't have books at home.. And I began grassroots mobilization campaigns.. I ended up raising, getting more than 250,000, 1/4 of a million books distributed, 10,000 home libraries started, giving away 25,000 dental kits.. And that spread from Austin to Los Angeles, to Miami, to Atlanta, and at that point, I got the notice of the Obama administration.. So they asked me to join this commission, which was unusual because they were all educators.. They were university professors, they were academics, and here was an engineer in their midst.. But what was interesting is I was really focused, remember you asked me what are some of the transferable skills? Well, one of them was really be focused on the goal and what you want to accomplish..

And so, I focused on early childhood, and then I realized that we had a lot of kids who were in Head Start or other pre-K programs, and their native language at home wasn't English.. But federal funding at that time would only support English-only programs.. And you know that if you could teach a kid in its native language and then bridge that to English, they will learn both languages, and dual language really helps the brain as well.. And it would America and workforce that could be globally competitive.. And so, I stayed focused on how do we get that policy changed so that federal funding could be used for dual language programs? So the kids would still learn English, but they would also be supported in a way, in a language that they already understood, so they could learn English that much faster.. And I'm pleased to say that that focus actually got that policy changed and knock on wood, it can still hasn't changed.. But again, it was that focus and it was a really exciting time to be working in education.. - Well, how exciting? 00:28:55,500 That must have been wonderful, and clearly you had an impact.. So we're living in a time when there was a very strong focus and a lot of attention on serving historically disadvantaged groups.. Now, as a Latino woman, what obstacles and opportunities are you seeing emerge now that didn't exist before? - Well, I'm just so excited 00:29:18,298 about so many great opportunities that exist..

I like to say that in my first job, if you've ever seen the movie "Hidden Figures" and the woman had to run to another bathroom, there wasn't even a bathroom.. So that was a huge, dude, you're not welcome sign.. And I stayed, and I brought a bike into work and I rode my bike to the nearest building.. And finally, after six weeks they said, "Okay, we're gonna get you your own porta-potty." And it said hers on it.. - When was this? 00:29:49,740 - That was when I was first working at Sandia Labs.. 00:29:51,549 - Really, there was no women's restroom.. 00:29:53,130 - There was no women's restroom.. 00:29:55,940 Hey, but you know what, if you go to even to the White House and even to Congress, the women's bathrooms are ad-ons.. And that's one of the things I really learned, is that the men's bathrooms are really prevalent and very proximate.. So all the women, we would be hustling, sometimes to another floor to get to the bathroom..

And then we'd run back just to make sure we got back in time for the breaks.. But that's because architecture at that time didn't envision women being in the power positions in government.. So there's a lot of that that exists.. Wasn't just in engineering.. And I see there's just so many great opportunities.. And so, it's so important to see that you've got to prepare and do your homework.. I always like that it's not a handout, it's a hand up.. So be prepared, get your mental state in order, get rid of the chip on your shoulder.. I had to do that as well.. I had a chip on my shoulder, got rid of the chip on my shoulder, and really be part of being the solution at your company or making a difference at your company..

Those are the things that I'm really excited about for people.. I think all people have a much better opportunity.. Yes, there's been some obviously those historical issues.. But I know for myself, I'm so grateful that I've had many opportunities and sometimes I've had to really work to open up the doors of opportunity.. But then I worked really just as hard to make sure that there's a path behind me.. And in fact, I named my book, it's a middle school memoir, "Path to the Stars." But I actually would like it to be like a highway of opportunity for those who the rising generation coming up.. - So we have some questions from the students about, 00:31:51,680 how can they follow in your footsteps? They're so inspired by your story and the path that you've created.. How can other people think about creating their own really exciting career path? - I really do believe the first person 00:32:08,046 that you have to convince about anything is yourself.. And that is that confidence, for example, we talked about that rocket, in that when I finally after failing so many times and having that rocket go up, I just knew inside of myself, I could do this.. I could do science, I could do math, even though the world around me was telling me I couldn't..

But I had convinced myself that I could.. So for whatever your dream is, you're the one, you have to say, I can do this.. And know that within yourself.. And then figure out what is it gonna take to get you there? You see that my Stanford diploma, when I was in fourth grade, my teacher in a very farsighted fashion showed our class in Las Cruces, New Mexico, which back then was a small desert town, she showed us pictures of great universities.. And when I saw the iconic red tile roof and

sandstone buildings, and then the beautiful green hills, remember I grew up in the desert, I said, I wanna go there.. And she looked at me and she said, "Sylvia, this is one of the best colleges in the world, the universities in the world." And she said, "And you're smart, you can go there." And so at fourth grade I just said, I am going there.. And that's like an amazing, amazing goal for myself.. But I set about what is it going to take so that I can get there.. And I methodically went and did all those things.. And one of the first things I realized is I had to get really good grades..

- What was interesting is that you had someone 00:33:47,548 who said to you, "Hey, guess what, Sylvia, you can do that.. That's a realistic dream." There are other people who get different messages where people say, that's unrealistic.. You can not forget it.. You'll never get in there.. That's not a place for you.. Well, you know what, I have plenty of that in my career, and even in high school.. My high school counselor, when I signed up to go to college counseling, she looked at me and she said, "What are you doing there?" And I said, "I'm here to get college counseling." And she said, "Girls like you don't go to college." And statistically she was right, but as an educator, she was really wanting to say that.. You know what, that was like the three nos, I stood up, went into her office.. And she followed me in and she said, "Well, what are you gonna study?" And I said, "I'm gonna be an engineer." And she laughed.. And she said, "Girls aren't engineers." And I went on and as you know, became a rocket scientist and engineer and all that..

But also in my career, many times, I did global and international travel, and it was really hard to convince them, to let me do that.. And in fact, twice in my career, I had to pay for my trips to the countries before I even had that assignment in that company.. Because they didn't believe I could go there.. So on my own dime, I went to these two different countries, I met business leaders, I got letters of recommendation.. I came back and put those on my boss's desk, and they were like, we're hiring boss's desk.. And then what could they do but to hire me? Another time, I could not break into another company's international business, no matter what I did.. I had amazing sales track record on the domestic side.. And so what I did is I created a presentation showing that if they had the same kind of penetration and multi-national accounts in the Pacific region as I had back then, I would be able to, their sales would be up by several hundred million dollars.. And I remember the sales vice president, and I had my little presentation, got him for just a few minutes and went in the side team rooms.. He looked through the presentation and he said, "Oh, wow, this is great." And he went to grab the presentation, I put my hand on it..

And he said, "Don't I get this?" And I said, "Yes, you do, but it comes with me." And that was what it took.. - You get (indistinct).. 00:36:10,060 but I finally broke in.. So there are a lot of times that I've been told no, and I try to figure out how can I get to that yes.. And it takes time, it takes a lot of time sometimes but I didn't give up.. I think really important lesson here is a, you need to know what you want and then you need to fight for it.. And so there's that first step of figuring out what it is you actually wanna accomplish, and then making a beeline, even if you're gonna get some barriers.. So we have a wonderful note from someone who says that they are a fellow New Mexican, a Sandia employee and a female minority.. And is thanking you so much for being here.. And as she says, "I wanna understand how you chose to go into entrepreneurship and business and think of your life through that lens, as opposed to being a laboratory scientist with an interest in space." So how do you think about whether you wanna be on the front ends of research or entrepreneurship, business? - It's about knowing yourself..

00:37:14,630 So one of the things, back to JPL and the Solar Polar mission and the Voyager 2 mission.. So the Voyager 2 mission fantastic, went by Jupiter, all this great stuff.. The Solar Polar mission, great in terms of thinking about the universe of possibilities.. But then as I mentioned, materials hadn't even been developed, so it was going to be decades.. And I knew myself.. I needed to have more readily achievable goals and activities.. More like in the quarter by quarter or year by year and not measured in decades.. So that's when I realized that I needed to move to more of an industry that had that faster pace.. So that's when I moved into technology.. And I did start first in engineering..

But then I said, "Well, so but how do people move up?" Because I trained as an engineer, but then I'm working in a business environment.. And so I went to my boss and I said, "So how does one get to be one of those bigger bosses?" And he said, "Well, you've got to have engineering, but you need to have product, you need to have sales, you have to have P and L responsibilities." And then he looked at me and was like, "But that's not for you, right?" And I was like, "No." So I methodically organize my career to get jobs in product marketing, in sales and then P and L, profit and loss responsibilities at a company so that you could then become an executive.. So it was really conscious on my part.. - I love that.. 00:38:43,820 And it echoes some of the things we've heard from other speakers.. So you can trust that this is a path that others have followed and have been equally successful.. So one of the students wants to know what you did at Apple.. - Oh, so a couple of things, 00:39:01,256 I was in the domestic area first.. So large account marketing, sales and marketing, to big multinationals, and then moved over to Apple Pacific and then went into the Latin American area where I worked at a distribution, bringing in software distribution for the first time in that area for the Apple products, which was great.. And then building the business channel as well..

- Great.. 00:39:28,270 Now, I wanna go back to your really unique perspective, being a minority woman in a very important leadership roles that you've had.. Can you share some insights about the importance of having a diverse workforce? This is something we're thinking a lot about these days, the value of having people on your team from very different backgrounds, not just because it's the right thing, but it's also the smart thing to do.. Can you talk a little bit about that? - Yeah, especially today 00:39:58,220 when things are changing so rapidly, to have team members who also bring a different perspective so that you can all come together, is so helpful.. Because when there's so much rapid change going on to have

people who have had a breadth of experiences is absolutely vital.. I really find that to be incredibly beneficial.. Also, I have found working with people from other, either cultures, whether they're different American cultures or other international cultures, it's really important because they're already in their brain in a way being bi-cultural.. 'Cause they're, what you call code switching, they're doing that.. So they're basically having two ideas at the same time and saying, okay, this is what that is.. That really builds a lot of flexibility thinking, outside the box thinking, and so when they come into a team, they're frequently thinking about how you're thinking of a solution but they're able to add a nuance or dimension that you previously didn't have..

So I have always found that to be amazing, to have teams that have a wide variety of different experiences and backgrounds.. But I will say, you need to have a management team, and that's where culture comes in.. That it's really, you're respectful of people who have differences of different ways of being or thinking.. And I know, I always wanted to have somebody who would always challenge as well.. And a lot of times it's more comfortable for managers to have people who just line up with you, but I always like people who also challenge, because you need to have that additional thinking, especially when things are changing so rapidly, you need to be prepared for many different possibilities.. - So speaking of code switching, 00:41:53,240 we have a question from a student about the fact that you went from being an engineer to ending up in management and sales.. How did the skills you learned as an engineer translate into a world of business? Were those skills helpful? - Oh my gosh.. 00:42:10,052 For one thing, the math is a lot easier.. (indistinct) numbers, it's two decimal points.. Not a huge long number..

So the things too about scale, I had talked about working with in grassroots mobilization for education.. I wasn't daunted by the fact that you have to get 11,000 glasses.. I wasn't daunted by getting 1/4 million books.. The scale is not a challenge.. And that was so useful when I went to Girl Scouts.. Because again, if you think about the scale of the iconic cookie program, Girl Scouts is the largest female independent organization in the world because of the cookie program.. And that's 200 million packages that are moved every year.. And if you think about the scale involved in that, so I was able to bring a lot of leadership around rethinking the supply chain, the logistics, the payment, the IP around the names.. So there was so much of my business background that came in and was really helpful to the organization.. And it wasn't just the business but also the engineering concepts, the problem solving, the design thinking..

You design, you engineer, you manufacture and how you think about the process, the project management.. I'll tell you, project management is a skill that you can use in any industry.. So those things were so useful moving into business.. And right now, when the world's systems are changing, what I'm seeing across industries are systems engineers, industrial engineers are really having their moment, because the systems are basically being re-calibrated, re-created, and not just at a domestic level but at a global level.. And so, being able to hold that kind of complexity and ambiguity and still make sense of it and move it forward is an incredibly valuable skill.. - Well, absolutely.. 00:44:07,890 I think that's terrific.. I wanna ask the final question, which is a question I always like to ask all of our speakers.. And that is, a flashback.. We're gonna take the wayback machine, and we're gonna go back to your being in school at Stanford..

And you're now not speaking in this class, you're now taking the class.. And you're 20 years old.. What do you wish you knew when you were that age? - What I wish I knew, there's probably many things, 00:44:40,570 but one of them is to have really stayed in contact better with my classmates.. Because now I'm finding them again.. But I really wished I had enriched my professional experience by maintaining those ties.. The other one is I wish I had even been more confident and believing in myself, and taken on even more risks.. I feel like I did a lot but I feel like, you know what, I think I probably could have swung for the fences even a little bit more.. - Really, so you would have given yourself 00:45:11,190 even bigger challenges? - I think so.. 00:45:13,980 I think I probably would have.. But back then, one of the things about being a trailblazer is there really isn't anyone else's career you're really being able to model..

And so, I feel very good about what I've done.. But now that I've done it, I thought, well, you know what, maybe I could have even been- (indistinct), you could have done more.. Isn't that funny? 00:45:33,610 It's like, you always get to a place and people look to you as a real success and you're going, yeah, but what's the next mountain I could climb? - Yeah.. 00:45:45,430 or things you would have done or wanted to have learned that you said, I wish I had taken that when I was in school? - I'm grateful that I did take.... 00:45:52,460 I took sailing, I took squash, and those are really useful skills to have.. I do wish I had taken a little bit more history, because I really enjoy history and history can really help us understand the future by looking at people's patterns in the past.. But I really did enjoy a lot of of meeting people from different areas of the world, and not just in my engineering classes.. I made sure that I met students from other classes or other schools as well.. And that was a really useful, that was really beneficial.. It's been fun because lately I've been running into more of them, a lot of the students in the business school that were in that era when I was there..

- Great, this was so fascinating.. 00:46:43,590 I can't thank you enough for inspiring us and for inspiring all of the young people that you have throughout the last decades.. So thank you so much, Sylvia.. - Thank you very much.. 00:46:55,413 (upbeat music)..