The ENGINEERING CAREER COACH PODCAST
SESSION #35
4 Steps For Taking Your Idea and Making It a Reality in Your Engineering Career

Show notes at: http://www.engineeringcareercoach.com/misspossible

Anthony's Upfront Intro: In this episode I will interview a chemical engineering student who raised $88,000 to take her dream of empowering young women and make it a reality. Lets do it!

Episode Intro: Welcome to *The Engineering Career Coach Podcast*, where it's all about helping real engineers to overcome real challenges and get real results. And now for your host, who is on a mission to inspire as many engineers as possible, professional engineer and certified career coach, Anthony Fasano.

Welcome to the show. I have an awesome show for you today. Today's show is going to focus on taking an idea that you have and making it a reality. And that's something that's not easy to do but if you can do that it can shift your career and your life. And I'm going to talk to a recent graduate today who did that and raised over $88 000 to make her dream become a reality. It's a very inspiring interview and I'm looking forward to it.

Before I do that let me just take a quick minute to recognize our sponsor for today's show, Purdue University's Master of Engineering Management Program. This is a topnotch program. It was voted one of the best online graduate engineering program by US News and World Report in 2014. And I get this question all the time from our listeners and engineers across the country and the world - "Should I get an MBA or should I get a Masters of Engineering Management or what are the other options?" This is an awesome option, the MEM, especially from Purdue. Just give them a call. Just check out their website and get more information about it. I always tell engineers before you make a decision like this, get educated.

What the Purdue MEM Program allows you to do is to earn a Masters Degree that's specifically designed to advance your engineering career in industry, with on campus or online study options, which make it very flexible for you. For details on the program you can call 1 877 598 4233 or email promasters, that's promasters@purdue.edu. They are processing applications daily.

And last announcement before I jump in to the main segment of the show, which again I'm really excited about, this idea of taking ideas and making them a reality. You have to think about how that can apply to your engineering career throughout this show because you're going to see a lot of nuggets planted throughout it. But before I jump in, the one thing that I've got to mention is the event that I'm going to be putting on in Washington DC, end of April, early May called *The Engineering*

Career Success Summit. The idea is to bring motivated engineers together of different experience levels and help them succeed.

We cover all different ranges of topics whether it's for students - we have an FE exam author coming. For young professionals we talk about goal setting, fast tracking your engineer, networking. For experienced professionals we talk about delegation, effective management, earning trust. But I need your help because we need to fund this event. Because of the caliber of the speakers and the number of sessions we're doing and the location of it, down in our nation's capital we need the funding now so we're running a funding campaign on Kickstarter. You can see it at engineeringevent.com. There's a pretty cool video we put together there.

And if you can't come you can still consider funding the event. I'd really appreciate it. You could put a dollar up if you want, just to show support for engineering career development. You can make a pledge and get a motivational e-book that I've written or a pretty cool *Engineering Your Own Success* t-shirt. And if you do want to come, the ticket prices, they're extraordinarily low because we're doing this in advance to raise money. So please again, check out engineeringevent.com and get your ticket while the tickets are available.

Alright, so with that I'm going to jump into the interview. My interview will be with Supriya Hobbs, who is a Chemical Engineer by training. She graduated not long ago from the University of Illinois. She has two parents that are Scientists so her career was destined to be in Science and Engineering and now she finds herself right in the thick of a startup with a lot of money that she raised. She has a co-founder, Janna Eaves, who also was an engineering student. And now she's got to take this and really, really make it a reality with the funds that she's raised and she talks about that.

I'm going to give you a couple quotes that'll lead us into the interview segment. These are two quotes from Scott Belsky. He's the author of the book *Making Ideas Happen: Overcoming the Obstacles Between Vision and Reality.* The first quote is ***"An Idea can only become a reality once it is broken down into organized, actionable elements."*** And the second quote, which is an awesome quote, is ***"Most ideas are born and lost in isolation."*** I'm going to say that one more time and then we're going to get into the interview - "Most ideas are born and lost in isolation."

Coaching Segment:

Anthony: Alright, now it's time for our main segment of the show and I'm very excited for the guest that I have with me here today, Supriya Hobbs. Supriya is the creator of *Miss Possible* and we're going to get into exactly what that is and kind of her journey as an engineering student to taking this amazing idea and bringing it to reality. So Supriya, welcome to the show.

Supriya: Hi, thank you so much for having me.

Anthony: Well thanks so much for coming on. I'm really excited about having you. I've done quite a bit of research, reading through your site and your Indiegogo campaign. And for those of you out there not familiar with what that is, Indiegogo is a crowd-funding site where you can take ideas and you can make them a reality by raising funds. And Supriya and her partner raised almost $90 000 on Indiegogo, which is amazing. I mean that just blew me away.

So with that Supriya, let's get right into it. Why don't you tell everyone a little bit about this idea that you had. Well first of all tell us about your background in engineering as a student and then how you kind of took this idea and how it came to you.

Supriya: Definitely. So I just graduated in May with my degree in Chemical Engineering and I studied at *The University Of Illinois*. And while I was there I was a little bit, shall we say surprised and a little bit irritated to find that I was among a minority of women in my engineering classes. So at school I got involved in *The Society of Women Engineers* and I started doing outreach activities, bringing Science and Engineering to kids in the community, spending a lot of times in classrooms watching how kids engage with these activities and really showing them and reminding myself of all of the really cool things that we can do with engineering.

So through that and through a community for entrepreneurs on campus I met my co-founder. And both of us felt really, really passionately about helping girls see the value in pursuing careers in Science and Engineering and more specifically the value in communicating this message of 'I can change the world as an engineer or with science'. We thought that was a really key motivator for ourselves in our career choices and then it was something that we saw consistently when talking to our peers and from looking at research that had been done with kids.

So we started reading up on it and we discovered that role models and early exposure are really critical to girls' career decisions. So we decided we wanted to combine those two and we sort of took an entrepreneurial spin to it and came up with the idea for *Miss Possible*. So we are a startup toy company that's seeking to empower girls to dream big. We are designing a series of dolls and apps that represent strong female role models and help girls interact with these characters and really engage in their fields to get them this early exposure that's so critical to their career decisions.

So for example our first character is Marie Curie, the Nobel Prize winning chemist and physicist. And girls look at their doll and it's a normal doll. It's an opportunity to play imaginatively. And then in the app Marie will walk kids through hands on chemistry and physics activities that they can do with materials around the house.

Anthony: Wow. That's amazing. That's really awesome that you kind of came up with it and that you found your partner through the entrepreneurial club. I think that that's really awesome. Let me ask you a question before we continue on with this story, just based on what you said already. A lot of times when I speak with engineers I try to help them to try to find what they are passionate about and for some people it takes years and it can take a long time to find.

And I know it's something hard to really explain but maybe you can just give us kind of your thoughts on how you realized that this was your passion. I mean I know I read on your website about how you felt so passionate about this. Maybe you could just explain to the listeners how does it feel when you find what you're kind of meant to do.

Supriya: That is a hard thing to explain. I guess for me it was the sort of problem that I spent a lot of time thinking about. And I think when people latch onto the problem that they want to solve they tend to approach it from sort of two motivating standpoints. One is, "I wish I had been given this advantage," and then the other one is, "Gosh, I really was given this advantage. How do I share it with other people?" And for me it was definitely the latter.

I never really considered doing anything outside of Science and Engineering because I was seeing Science from a very young age. Both my parents were Chemists. You know between doing chemistry experiments in the kitchen and seeing my mom - who is my number one role model, I always knew this was something I wanted to do. So the idea that other people had a much harder time making that decision, getting to the same point as me, I guess that fuelled me a lot.

Anthony: That's interesting. That's great. So we can continue on with the story now. And one of the reasons that I wanted to have Supriya come on was I understand that a lot of the listeners here are engineers, they're maybe in corporate practice but I still talk to a lot of engineers that have either ideas like Supriya and they don't necessarily act on them. And not necessarily just something outside of engineering necessarily or something different. It could be right in your engineering company that you have an idea that you want to try to bring to the table, something different. You want to start a new department. It could be anything.

And that's why one of the reasons I want to really talk to Supriya, because taking an idea and making it a reality is a very challenging thing to do. So alright Supriya, so you met your partner, you still had this idea to have this startup toy company but obviously you needed funding, you need to go forward with it. So tell us kind of how you did all that.

Supriya: Right. So I think the first step was actually deciding to make it happen. We had the idea and talked about it and thought about it and dreamed about it for about a year before we made any

measurable progress. And that was because at that point we liked it and we thought it was cool but we hadn't really committed to it. We hadn't decided that this is more than just an idea; this is going to be a reality. That was the biggest step for us - making that mental leap.

And for us that came largely because of inspiration. So we had the chance to meet with other engineering alumni from The University of Illinois out in Silicon Valley. And these people had started in the same classrooms that we were in and had ended up founding these companies that are, many of which are really high profile. So seeing that and spending that time surrounded by those sorts of people was really, really inspirational. It's kind of that motivation we needed to say, "Hey we can turn this from an idea and make it something real."

Anthony: That's awesome. So that gave you a big push.

Supriya: Yeah, that was definitely the inspirational and the motivational push that we needed. I guess the next step for us was finding the right people with the right skills. So once we decided that this was something we wanted to actually create we had to take a very honest look at our own skillsets and our own abilities and figure out where our strengths were and also where our team was lacking.

Two of us alone definitely didn't have all of the skills required to start a business. As much as we are passionate and have ideas, neither of us is very good at design or art at all really. So finding people with those skills that we lacked was really, really critical. And I think that's something, you know having that recognition of your own abilities and what the project really needs is key in moving forward.

Anthony: So knowing your strengths and also your shortfalls and how you could leverage your strengths and kind of get help where you need it.

Supriya: Right. So for us help came in the form of our designer, Kelly and she has been super instrumental. I mean every image you see on our website was made by her and when you're talking about a startup like this, and especially a consumer facing startup, the images are how we communicate. That is our brand. That's how we share our messages with the world. That was a really big step for us.

Anthony: That's awesome. So you built this team. That was a huge, obviously a huge step.

Supriya: Yeah.

Anthony: And then how did you proceed from there? Now you've got this team. You got the inspiration. You got going. You put together a team. Now where do you go from there?

Supriya: The third step was talking about it. You know a lot of people tend to want to develop things in secret and short of perhaps, I guess secretive intellectual property that you want to develop, you can't create your products in a bubble. And so we went out and we talked to parents and we talked to kids. And our idea actually changed shape a couple of times as a result of those conversations we had.

So whoever the customer is, and in our case we have this sort of multi-faceted customer where we have the people that are shelling out the money for it and that's parents and grandparents. And what they want to see has some overlap with what our users or their kids want to see but not necessarily the same thing. So interacting with both of those groups of people and understanding what they're looking for as definitely the big step. And then along with that came spreading the word and I think that's where we got into the Indiegogo campaign.

So as much as it was about getting that funding that was really essential in helping us move forward, it was also about really validating that this is something that the world wants to see. And as wonderful as it is when people say, "Wow, this is great. I think what you're doing is amazing and I totally support it," it's a whole other thing to have them say, "This is great, I support it and here's my credit card."

Anthony: Yeah.

Supriya: That validation that you can't get just through conversations.

Anthony: Right.

Supriya: So that was the, possibly the biggest value and one of the longest lasting impacts that we can see from our Indiegogo campaign. Obviously the funding is necessary but in terms of product development and in terms of moving forward as a company with the validation of 'these people are willing to support us' was really, really important.

Anthony: That's a great point. Just from some of my own ventures, I did an Indiegogo campaign not too long ago with my daughter, who is eight. We did some kids books and we ended up raising a lot of money to bring them to hospitals to give out to children. And it was awesome but it was a ton of work and you've got to hustle for every single second of that campaign, as you know, especially because you raised quite a bit of money in a short period of time.

But you're right and I think that this, any engineer out there, I mean you may have an idea that's a big idea where you want to start a huge company or you may, like I said before, want to start a new initiative in your own company. And you may get people all the time that say, "That's a great idea, that's a great idea. Why don't you pursue it?" But then when it comes time and you say, "Well are you going to help me?" or, "Are you going to come to the first meeting I'm setting," or, "Are you going to do (this)?" that's when you really find out who's behind you, what kind of support you have.

There's really no other way to do it and like Supriya said, when you have to get money and exchange money from someone that's really validation. And it must have been a great feeling to start to see how that campaign kind of took off.

Supriya: Yeah, it really was. And I think the value in talking to your customers, whether it's external or you're handing off something to a different department in your own company, is that you get some of the validation and some of the buy in a little earlier. So it's not like we had created this product without any interaction with kids or parents and then put it on the Internet to see if they liked it. At least we had done some of that iteration, some of that development and knew that at least a handful of people liked it before we put it out to test with the masses.

Anthony: Sure. So the campaign must have been a tremendous amount of work but like you said, it was good in a lot of respects. You obviously raised the money but also you got interaction, you got validation. But now this campaign ended, what was it a few months ago, I believe?

Supriya: Yeah, it ended in mid-August.

Anthony: Okay, great. Okay, the campaign ends, you have some funds but really importantly, you have kind of feedback from people. So how have things been going now? I assume actually from some of your updates, it looks like you're right into product development now, making progress on that.

Supriya: Yeah, we're making progress, certainly. I think inevitably with any startup you're going to run into some things that you didn't anticipate. So we had created a digital 3D model and we worked with a professional to create this 3D model of the doll. And of course, as engineers I'm prone to accept your CAD models as real, true representations of reality. And the fact is you just can't get a real essence for the product until you hold it in your hands and so once we had the product created from the CAD model we realized, "Well, so this isn't quite what we wanted," and I guess that was sort of a surprise.

So these are the sorts of things that have been coming up and making us go back a little but and iterate a little more but it's all a part of the design process. For us it's a little more focused on

aesthetics. In engineering it's more focused on functionality but it's the same. It's the same engineering design process that we saw in school over and over again.

Anthony: Let me ask you this question. How did you, I mean you have a background in Science, your parents in Science, you went to school for engineering, where did the entrepreneurial spirit that you have come from? Did you always have it or is it something that came about for some reason?

Supriya: If you had talked to me as a freshman in college I would have told you that I was going to go work at a Fortune 500 company. I knew exactly which one and I was going to spend my whole career there. So no, I didn't always have this. I think it was almost an accident that I ended up exposed to the entrepreneurial world.

I was applying to be a resident advisor and the way the structure of the program worked in Illinois was that you couldn't choose where you lived unless you applied for these specific living, learning communities, which were in specific halls. And I really wanted to live in the dorm that was closest to the engineering classes so I applied to live in Innovation LLC. which was the living, learning community that was focused on entrepreneurship and innovation.

Anthony: Wow.

Supriya: And somehow I got the job. So I started there and that was my first real exposure to entrepreneurship. Before that I guess I thought it was kind of cool but I never once considered the possibility that I would start my own business. But I took a lot of classes through that community. I met a lot of people through that community. I think even my whole mindset has changed and you can sort of see the difference between the people that are looking critically at the world and saying, "Hey, this has been great, I'm going to make it better," versus those that are saying, "Hey, this isn't great, I guess I'll live with it." I think that's something that I picked up definitely in the last couple of years.

Anthony: Wow. It sounds to me, and this is of no surprise to me but from a lot of the stuff that you're saying, with a lot of your success so far and a lot of the actions that you've taken have come down to people - the people you've surrounded yourself with, the people you've met at the alumni that you went and met and you got inspired by, which I think is great.

I mean I'm a huge believer in communities, that's why I actually started a community that I run through the site for engineers that are motivated and want to have great careers and it's been helpful to see people get energy from each other and it's obvious that that was obviously a big help to you and I'm sure it still is and will continue to be.

Supriya: Oh definitely.

Anthony: Yeah.

Supriya: Gosh, people are so general.

Anthony: Yeah.

Supriya: We've had a lot of mentors. We've had a lot of supporters. Some of them have been with us from the start. Some are family. Some have been friends. Some of them are professional advisors. But that's been, there's no way we would have gotten here without it. Actually I don't know if my co-founder and I ever would have teamed up if it weren't for one mentor we had that suggested we work together.

Anthony: Mm, wow.

Supriya: So yes, we had a couple of really key influencers.

Anthony: That's awesome. So we'll kind of wrap things up but I just want to ask you a couple questions about the actual, you know the company. Kind of obviously I know you're in the early beginnings of it but I'm sure you have a marketing plan and some ideas but have you thought about or have you done anything with organizations, like stem organizations, whether it be with the younger like school organizations with the girl scouts or other kind of organizations? Do you have plans or are you doing things like that to get the word out? Or will you, I guess maybe when you have the product you will?

Supriya: So many of those organizations actually helped us spread the word when we were running our Indiegogo campaign and that way we've partnered with a number of them. And then we're continuing discussions with some of them. For example, I've got pretty strong connections with The Society of Women Engineers since I was really involved throughout college. So I worked with that organization a little bit and will definitely continue to look for opportunities to engage with these organizations. Because there are so many of us with similar values and similar missions it doesn't make sense for us to compete for people's attention. We're all working towards the same thing, you know let's work together.

Anthony: Mm, excellent. And how about your business plan as far as obviously you have the doll, is the idea, from what it sounded like, continue to come up with different historical characters and scientists?

Supriya: Yeah, so I think we have a couple avenues we can take this. One natural opportunity for extending our brand and extending our product is to expand into other dolls and we have our first three selected. So our first one is Marie Curie, as I mentioned. Our second is going to be Bessie Coleman, who is the first black woman to earn an International pilots license.

Anthony: Wow.

Supriya: And then the third will be Ada Lovelace, who is the first computer programmer. And we're continuing to look into other dolls that we can create but this first three will keep us busy for a little while.

And beyond that we're even talking about maybe science kits at some point or even focusing more on the app side. Essentially what we're doing with this app is scaling up the outreach activities that we used to take to classrooms. So instead of us having to go in there, essentially it's on a tablet instead and you're learning from Marie Curie instead of me. So maybe that's another avenue we can take it and focusing on maybe bringing this to schools. I see a lot of opportunities.

Anthony: That's great. And I think having the over a thousand funders that you have, the Indiegogo and the other social media and other outlets, you obviously can get the customers voice, like you said before and kind of use that to help you I guess decide where to go, which is an awesome benefit to have and I'm sure obviously another big benefit of the crowd funding, which is a great thing. Well this all sounds amazing.

Real quickly before I let you go I just want to kind of make everyone aware of the different places to find you, where I guess the best place would be to go to bemisspossible.com, which I'll link to in the show notes. And again that's be, the word b-e and then miss, m-i-s-s and the word possible.com. And I will link to that and I guess they can keep kind of in touch with you there. I'm sure the social medias are on the site, I already saw. So they can kind of keep track of when this product's going to come to market. I'm sure that there's a lot of engineers listening that have daughters, including myself - my daughter's eight, she loves science and I would love to get her a doll when it comes out.

Supriya: That's great.

Anthony: So we'll post that information in the show notes. And just to kind of summarize, before I let Supriya go, she gave us some of the steps that it took really to take this idea and make it a reality. The first being decide to make it happen. And in order to kind of get the push to do that, her and her partner got a lot of inspiration from other alumni that they went to visit. And again, those of you out there listening, you have an idea, you want to do something, talk to people. Talk to people that have done things similar to that.

The next step that she talked about was finding the right people with the right skills. And I think this is a big one because I know as engineers, or at least myself all the time, we think because of our education and because of all the stuff that we've learnt sometimes that we can o everything or sometimes the entrepreneurial side of you says I can do everything. But at the end of the day if you're going towards a bigger goal you need to get help. You need to get help from the people that can kind of fill the gaps with the things that you can't do and you also have to recognize where your time is most needed. So that was kind of the second step.

And then the third step, which I thought was great, was talking about it - talking to the people that you're going to be serving, talking to the users, the end users - another huge deal for engineers, and I tell engineers this all the time even when it comes back to just straight engineering design. I've talked to so many engineers that designed projects without even asking the people maybe that are going to use the park or use the road what they want to see in it. And I think that that's a huge takeaway that can help you be a much better engineer and obviously it works in different worlds, like it's worked here for Supriya in building this toy.

And then lastly she talked about the actual campaign, getting involved in Indiegogo and really - I use the word hustle because I know when you do these campaigns you're on the phone, you're on emails all day, you're getting peoples' interest, you're trying to get people to support you, you're trying to validate your idea. So it's kind of really, really going through and putting this to the test. And listen, I don't care what you do, what kind of career you have, if you're an engineer and you want to make a partner, whatever the case may be there's going to be some hustle involved. There's going to be some hard work involved. You're going to have to meet the right people. You're going to have to take some extra effort and that's what Supriya and her partner have done and they've now put themselves in a position I think to really launch this company and hopefully do a lot of great things for STEM and for getting the young girls involved in STEM and science and that's all great.

So Supriya, thank you so much for your time. I'm really excited that you're, not just on this show but also we got to talk about this and I can kind of watch you and we can kind of check on you and the company and see how it grows. I really appreciate the time.

Supriya: Oh thank you so much for having me. This was fun.

Take Action Today Segment:

Anthony: Now it's time for the take action today segment of the show. This is the segment where I'm going to give you a piece of action that if you take and implement it you can see some results immediately.

One of the things that came up in this show, whether you noticed it or not, was the idea of people. People motivated Supriya when she got around the right people. People mentored her. People funded her project. Everything is about people in your career and your life.

So what I want you to do is identify five people - write them down on a piece of paper, five people - that can help you in your engineering career, whether it's inspiring you, motivating you, teaching you, lifting you up, whatever the case may be. Identify them and reach out to them for something. Whether it's a phone call, whether it's a lunch, whether it's just an email, whether it's anything that you can do to get something from them to help you move forward. Get some inspiration because I know you have ideas, goals, things in your engineering career that you want to become a reality. But there's here and there's there and you need to get there and this activity should help you to do that.

Anthony's Closing Remarks:

And please remember if you do really want to get around motivating people please consider helping out with the Kickstarter campaign for The Engineering Career Success Summit at engineeringevent.com. I promise you if you come to this event it will blow your mind; it will change your career forever. So please consider checking that out. And until next time I hope that you continue to engineer your own success!

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