Interview with Moses Mwakyanjala
PhD graduate from the Luleå University of Technology
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My name is Moses and I'm a PhD graduate from the Luleå University of Technology. So I was working with SSC (Swedish Space Corporation) and the university during the PhD, and the idea was to create a some kind of communication equipment for satellite telecommunications. And after the PhD I received tremendous help from LTU business. And yeah, so they'll help me to me and my friends to commercialize the PhD project i did. What service do your company provide? Okay. So in when you want to control your satellite, you always need some communication equipment. And most of the time, this communication equipment is heavily based on hardware. So these are things they call FPGAs or ASICs. And so what we did, we created some kind of a software that can do exactly the same thing that this big expensive hardware can. And the solutions are more flexible, very cost effective because we use commercial off the shelf components, which could be a standard computer that you can get from from a store. When did you decide to realize your ideas? Okay. I will say maybe one and a half years before I finish my PhD studies. Yeah. So that's when and yeah, because LTU business were giving a talk [about commercialization], but that was in Kiruna a few hundred kilometers from here and yeah, so they gave a talk. They say okay, if you guys feel that you need to take your step forward, then they come to reach us. So I reached them and yeah, they gave me the inspiration and all the support I needed. So why was it the right time to start a company? Yes. Okay. Yeah. Because the I will say the the IP was very good. So it would have been a shame not to be a commercialized because I believe that PhD work should move beyond thesis, should move beyond academic papers and actually be practical and help the industry. So how do you balance academic publishing and to keep the IP (intellectual property) Yes So that's a very tricky question. So right now, so what we have done. I will say I recreated the entire thesis – the work that I did in LTU in another way, because my previous work is already is already published. Yeah. So therefore we had to, to recreate it from scratch, unfortunately, and also for, from scratch. And we also added extra added features that we are not needed in, in an academic setting, but necessary for the industry. So it was just myself and Thilini so my colleague and she she comes from a business background. Business, international marketing. And I'm from the engineering background. So we are complementing our skills. What are the mods important skills and competencies? I would say, number one, are working long hours. That's I think every PhD student knows that. So yeah, so this is just like an extension of your PhD

studies. But in addition to the to the research yourself, you have to worry about your customers? And you also have to worry about your investors. So hard work. I will say that will be that will be number one and number two. I think you need to create a very good network because coming from the university, the industry is a little bit different from academia and therefore you need to know where to get the all the help that that you need and the network help in validating your idea, because that's also very important. They also help you to raise capital because without capital you can go anywhere, right? Where did you learn about entrepreneurship? So we there is a course in Entrepreneurship that we did. With Professor Anna Öhrwall-Rönnbäck And professor Resa. Yeah. So they had the course and. Yeah. So that was actually we studied entrepreneurship and which is very, which is very inspiring. And the few things that it didn't cover was things like fundraising, how to create a team, how to create a network. Yeah. So those are maybe the main things that are that I am missing from academia. What advice would you give to students interested in entrepreneurship? Okay. So I would say, number one, they have to realize that whatever ideas they have, that might seem insignificant, but they could have huge applications in industry. And so this is something that they they should see this as a as an alternative as well after after their academic careers that they could consider commercializing the commercializing their their projects. And to do that I think the first thing will be to start creating a network as early as possible so you don't have to to finish. You don't have to wait until you finish your academic setting before you. You start, for example, learning how to do fundraising or how to create a team. Do you still collaborate with the university? Yes, I collaborate with university. Yeah. So my previous PhD supervisors, for example, I talked to them once in a while because we always need to know what's happening in the research so that we can. assert the kind of new ideas, new technologies that we can incorporate into our into our solutions. So what support did you get from University? So starting with LTU Business, so LTU Business, they help us with the IDD (information, due diligence). So, um, the first thing they did, they help us to validate the idea. validating the technology itself and also validating it with the customer, right? Because the technology can be as cool as possible. But if nobody is willing to buy it, then the commercialization becomes becomes impossible. So that was a LTU Business. And so after we're done with LTU Business, we write the proposal and we apply to the Arctic Business Incubator (ABI), which is where we are now. And so with Arctic Business Incubator, there's also there's a lot of help here. So we have an advisor who help us with everything, mainly fundraising, setting up a team, setting up a board of directors, for example. And in addition to active business incubator, we also applied to ESA BIC. So we are part of ESA BIC and we are graduating as we are speaking. So this I think this would be our last month with a ESA incubation program. So ESA BIC also give tremendous help in in particular for this is only applicable for space companies and when you're part of ESA BIC, in addition to to the funding that you get you also receive a lot of help and this is the kind of support that you get from the European Space Agency. So we have had a very good laboratories, for example, or test beds that we receive from the European Space Agency that's been, for example, software packages. So there are some packages that could take you years to build and ESA already had this. So we were able to to get some of those and incorporate those in our products. And so these are the the incubators. And then there's also other funding sources in the region. And so in particular, these are Region Norbotten itself. So Region Norbotten provides a wonderful funding and there's also ALMI So ALMI is all over Sweden. They give loans and there is also Norrlandsfonden particular to the to the northern part of Sweden. So they give convertible loans as well. You just got your first financing round – tell me more? Yeah. Fundraising. A

fundraising is a is an interesting experience. It's always take take quite a lot of time. And so if there was one advice that I give to companies or future entrepreneurs that are if you need funding, in January. Right. You have to apply. You have to start at least March the previous year. So you have to realize that fundraising takes takes a lot of time and you have to start this process even before you even before you need this funding because it's always takes a lot of time and and a lot of energy. When you look back – what was the main surprise for you? Yeah. Big surprise. I'll say that. Yeah. Fundraising itself. Because on paper, fundraising seems to be seems to be quite, quite straightforward. But practically it wasn't as straightforward as straightforward as I thought it was. It was going to be. Yes. And another surprising thing is that we realise that because now there's some big companies, you know, that that we are working with. And this is something that I didn't expect, at least at the very beginning. So now we realise that, okay, even big companies actually appreciate the work that is done by smaller companies. So thank you so much for the interview!