

Interview with Govinda Upadhyay

Winner of the EIT Change Award 2015 and
finalist in the Forbes Under 30 Change the
World Competition



Hello Govinda. It's been almost six months since you won the 2015 EIT Change Award. What did it change for you?

First of all, it brought us a lot of credibility and confidence. It also gave us more visibility than we were expecting. For example, we started getting emails from different places in Europe, like Germany, France and Slovenia, from people who wanted to find out more about our project and how they could bring it to their country. It made us realise that we really needed to pump things up.

What impact did winning the EIT Change Award have on your business start-up, LEDSAfari?

We had to expand our team. We were just a bunch of students and we realised we had to go full-time. We also got a business coach, Mukul Kumar, from the EIT's Climate-KIC (Knowledge and Innovation Community). He was very happy with our work and agreed to become our CEO. He also gave us a lot of confidence in what we were doing.

When you started, how many students were involved?

It started with basically just me as part of the KIC InnoEnergy, when I was doing my Master's in Sustainable Energy Engineering in Stockholm and Eindhoven. I then moved to Switzerland for my PhD and two of my friends joined, Elisa Wepfer and Naomi Savioz.

So things then started to accelerate fairly quickly?

It was not so quick. We also decided to make a key change in our strategy. Typical start-up syndrome! Our initial idea was to provide lamps to everyone

who didn't have a light, particularly in developing or emerging economies. But then, as things started to evolve, we realised we didn't just want to sell people a lamp, we wanted to teach them how to make the lamp.

We decided that we should focus on children in schools, especially the 10-15 age group. We got immediate interest from Swiss schools, who were eager to learn about the project as an educational tool. We started to think in terms of every student having the same basic needs, whether they come from a western economy or developing country. Everyone appreciates a practical and interactive education, not just the theory. We want them to learn something practical, so they can make the lamp and use it for hiking, in the garden or for studying, for example.

The demand has now really taken off, so much so that I decided a couple of weeks ago that I should stop my PhD to work full time on LEDSAfari. I know I have to focus on this properly or it won't work. The whole scenario has changed now, it's a different ball-game.

Did winning the EIT award in May help you to attract new investors?

It's a bit too soon for that in concrete terms, but we are targeting foundations and impact investors. We want to be a lean business.

We want to ensure all our operations run as smoothly as possible. Anyone can come to us from any country in the world. We train their trainers so that they can spread in their respective country. We sell both the lamps and the training. So say an

organization involved with schools in Belgium contacts us, we will offer to train the trainers and then these trainers can implement the LEDSAFARI project in the schools.

How is the lamp actually powered?

It's very simple really. The USP of LEDSAFARI was to make a lamp in a simplified way.



We're using just a few components: a solar panel, a small battery, a switch and a LED bulb. These components are chosen to ensure that the lamps are simple to make but fully functional. It took us a year to optimise all the components. The idea is that, through the lamp, we can educate children about sustainability, about solar, about energy technology and recycling because our lamp is made from recycled materials. We are now introducing sensor-based lamps, based on the same make-it-yourself principle. We are also in the process of introducing 3D printing which will allow people to design their own lamp before fitting in the components.

We wanted to do more than just create a lamp - we wanted to create something visionary. Right now, we are also building a LEDSAFARI app as an e-learning tool through which students can exchange design ideas, stay engaged in the process of development and create a community. The fact that smartphones have become much cheaper now means that more people can take advantage of this app all over the world.

The students can also use this app to measure their own impact. This is basically a quantification of their action in terms of the energy and money saved by using a solar powered lamp, as well as CO2 saved, hence making them more environmentally conscious people. We believe that this can help our future generation to be better prepared to handle

climate change and to be pro-active in making the world a better place.

So now you're going to sell a complete lamp-kit, with the lamp materials, the training and the app?

Exactly. We are still developing the app but the idea is indeed to sell the lamp components, training and the app together.

How much does that cost altogether?

We don't have a single unit price. So, for example, in the EU and the developed world, we sell the kit for 30 euros. In developing countries, it would be more like 10-15 euros. We believe everybody has a right to this kit, so in cases where somebody can't pay, we look for help from partners to subsidise the cost.

What is your current turnover?

It's hard to say for this year because we've just got going. But for 2016, we would need 1-1.5 million euros as investment. We aim to be fully profitable by 2018. That's our goal. We would like to reach 1 million students in the next two years. This will require an investment of 10 million euros and a network of financial and implementation partners with the same vision.

You recently won a prestigious US prize from Forbes magazine. Can you tell us more about that?

Sure. It was a contest called the Under 30 \$1M Change the World Competition organised by Forbes magazine. The EIT actually encouraged us to enter the competition. Forbes liked us and invited us over to Philadelphia. There were more than 2,500 applications from all over the world. We made it to the final and received \$100,000 in prize money from the Pratt Foundation. They told us they loved



our project and our unique approach, which was very nice to hear. It was an amazing event – with an audience of 2,000 young entrepreneurs handpicked by Forbes from all over the world. I was really struck by the energy and enthusiasm levels there. We spoke to a lot of people and it certainly encouraged us to look at the US market.

What will you do with the prize money?

We're going to invest it back into the company.



You have taken part in various EIT Community programmes, including the KIC InnoEnergy Master Programme and Climate-KIC Innovate4Climate Accelerator. What for you is the most important facet of the EIT?

That's right. The KIC InnoEnergy Master programme was one year at the KTH Royal Institute of Technology in Stockholm and a year at the Eindhoven Technical University (TU/e). I then went onto the Climate-KIC Innovate4Climate Accelerator in Zurich.

What I really like about the EIT is its openness and its combination of education and entrepreneurship. I don't think any other programme in the world provides that. That's pretty cool. The EIT network is also really important. They are always able to come up with the name of someone who can help you. If you don't have this network, you cannot grow.

Is Europe's education system giving young people the right skills for the future? Are the EIT educational programmes you took part in different from other educational programmes you came across?

I was lucky, but I'm not sure whether traditional programmes can help young people go on to become entrepreneurs. But if you adapt these courses, as they have with the KICs, then why not? The EIT programmes are certainly different. I had options to go to other universities but I wanted to follow the EIT courses. They're really practical. You work on your project, it's not like working in the lab. They help you think beyond your specific background.

What advice would you give to young people interested in the EIT?

I was 22 when I started my Master's in Stockholm. My advice to people is that don't think you are too young to do things. Go crazy and just do it. Don't wait for the right moment to come. The world is moving fast and you need to catch up. Use the network and tools that the EIT provides.

In your view, is Europe innovation-friendly? If you could give one piece of practical advice to other innovators and entrepreneurs in Europe, what would it be?

That's a difficult one. In Europe, perhaps investors are looking more for something established. I think the US is more open in this respect, it's at a different level. My advice to other innovators and entrepreneurs is to believe in yourself, even when people are saying your idea is crap. Even if things are moving slowly, there will come a point when you start to go faster. It's very easy with a start-up to get depressed and stressed out. The key to success is just to keep going, to keep believing in yourself. Then no-one can stop you.