

A black and white close-up portrait of a man with short, dark hair, looking directly at the camera with a neutral expression. The lighting is dramatic, highlighting the texture of his skin and the intensity of his gaze. The background is dark and out of focus.

‘Our start-up
could never
have been
successful’

In July 2013, TU Delft alumnus Jan van Kranendonk and his business partner Thomas de Leeuw decided to discontinue their start-up company Sunuru. The reason was that customers were not interested in their ingenious solar project. Van Kranendonk spoke about his failure during the Failcon event in Amsterdam, which is modelled after similar events in Silicon Valley. 'Having your own company looks good on your CV.'

TEXT SASKIA BONGER PHOTO SAM RENTMEESTER

WHY DID YOU WANT TO TALK ABOUT YOUR OWN FAILURE AT FAILCON?

'Failcon is relatively important in Silicon Valley. The people there are more conscious of the type of company that a start-up actually is. As Jasper van Kuijk (assistant professor at TU Delft and comedian – ed.) once said: "Innovation is a fashionable term for something that often does not work". In the Netherlands, we are not yet sufficiently aware that failure goes with the territory. We'd obviously like to avoid it, but I take comfort in the notion that there's life after death. I have never received as many job offers as I did during the two weeks after we pulled the plug on Sunuru. Having your own company looks good on your CV. Moreover, failure taught me quite a bit about how a start-up works.'

WHAT WENT WRONG?

'As true engineers – we are both mechanical engineers – we designed a product containing tons of innovation. We did this in six months, and with €100,000. Our product had an attractive appearance and it was remarkably innovative. Our costs were low because we had used very little material. As an engineer, you tend to think, "This product is perfect. We'll just bring it to the market, and we're done". Subsidy agencies and

investors in the Netherlands were enthusiastic. We were too, of course. We wanted a scalable product, something that could become really big. After six months, therefore, we went to California, one of the world's largest solar-energy markets. We proudly presented our product to prospective customers. Their reaction? "See ya!" Only then did we realise that customers don't simply consider the costs. They are concerned about the

'So many people just keep plugging away, wasting a lot of energy, emotions and government subsidies'

risks as well. And they considered the risks too great. In order to reduce the risks, we eliminated many of the innovations from our product. This increased the cost, however, and this in a market where solar were getting cheaper quickly. We discovered that we were unable to be cost-competitive.'

THAT MUST HAVE HURT.

'Absolutely. Another speaker at Failcon said, "Failure is a gradual process through which

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CV

Jan van Kranendonk studied at TU Delft between 2002 and 2011. After completing his propedeuse (first year) in mechanical engineering (3mE), he transferred to industrial design. Although he never completed this Bachelor's degree, he did start two companies.

One of them was Numboards, which is still manufacturing cutting machines for Styrofoam. The other company was Pineapple Entertainment, which developed a game for mobile telephones. In his years at IDE, he also received a 'Young Wild Ideas' award of €10,000 for an algorithm for bending bamboo. In 2007, Van Kranendonk returned to 3mE, where he completed his Master's degree in mechanical engineering magna cum laude in December 2011. In the same month, he and Thomas de Leeuw established their company Sunuru. They are now exploring business opportunities within the industry, under the name VKI BV. For example, they gained access to the Argos oil company, which van Kranendonk says quickly generated a good plan for a new company. He prefers not to say what it is.

you slowly come to realise that your idea is bad". We pulled the plug after 18 months of hard work and €300,000 in investments. The most difficult time for me was during the two months before this decision. Deep down, you know that things are not going well, but you are afraid to acknowledge it. You become tired, moody and ill. Then we sat down together, and we both reached the same conclusion. It became obvious that it could never have been successful. I'm glad that we realised this relatively quickly. We did not want to become a zombie start-up. So many people just keep plugging away, wasting a lot of energy, emotions and government subsidies. Subsidies would have kept us going for years in a Dutch design niche, but that had nothing to do with manufacturing a scalable product. We were able to avoid bankruptcy and burnout. If you fail, fail fast.'

DO YOU HAVE ANY OTHER TIPS FOR TU DELFT ENGINEERS WHO WOULD LIKE TO BECOME ENTREPRENEURS?

'Participate in the YesDelft LaunchLab. It teaches all about entrepreneurship and provides concrete information about the methods you should use in order to become successful. We didn't start working on customer development until after we had completed our product. In the United States, we realised that customers are concerned about entirely different things than we were. For example, they have to estimate risks. No matter how hard you work to develop a product, if it's the wrong product, it's a waste of energy. Designing the product is only 20% of the work that an entrepreneur must do. I regard entrepreneurship as a science. You have a hypothesis. If it's negative, you make a note of it: nobody is interested in this product. Many students would like to build and sell the next 3D printer, drone or app. You can use these ideas to participate in the LaunchLab, but you should not think of the gadgets as your ultimate goal. Look around to see what is needed in the industry, and act on that. There are opportunities waiting to be found by entrepreneurial engineers.'

HOW CAN THEY FIND THESE OPPORTUNITIES?

'Together with my partner, I went to observe



companies, including Nova Terminals, which was previously Argos. We looked around to see what they needed. We are now developing a product and a new company, but it's still under the radar.'

DOES A FAILED COMPANY LOOK GOOD ON YOUR CV?

'At first, I was a bit surprised that Nova Terminals was glad to have us and that they were willing to pay for our visit. Yet having your own company does look good on your CV. It attests to your entrepreneurial spirit. We have a good explanation

for why our company didn't make it. This has led to a different manner of working. We have stopped focusing on technology push and turned our attention towards market pull. Our experience with Sunuru taught us that the first strategy can be very risky. The second strategy makes it possible to validate your innovation quickly, almost like a scientific experiment. Companies are willing to pay for this, because they have neither the time nor the fresh perspective that it requires.'

HAVEN'T YOU EVER THOUGHT, 'I THINK I'LL TAKE A REGULAR JOB AFTER ALL'?

'That's not an option for me; I'm not cut out for that. I'm curious and stubborn, and I like to work outside my comfort zone. I'm not in business for the money. I think that is the case for most entrepreneurs. You want to have the greatest possible impact, and sometimes you can fall flat on your face. That's no fun, but if you know that it goes with the territory, you'll be less afraid to decide to pull the plug. In the Netherlands, if we could learn to accept such failure, we would be able to innovate more quickly. In the United States, a bankruptcy is regarded as a success factor, even by financiers. This is because people who have experienced bankruptcy are much less likely to go bankrupt again. When we decided not to continue with Sunuru, we were embarrassed to approach one of the largest subsidy agencies. He told us, "Congratulations. Now you're experienced".'

www.delta.tudelft.nl/27930

YesDelft

In recent years, 139 companies have been established with guidance from YesDelft. According to figures from the TU Delft incubator, five have gone bankrupt. Of the other companies, 17 have gone out of business. Sunuru is one of them.



LETTER TO THE EDITOR

'Boffin'

When I graduated in the sixties, engineers were highly regarded. A new era followed, however, in which this regard was systematically dismantled. Jurists, economists and sociologists believed that engineers only built things and needed guidance. They therefore believed that it was their job to determine what could be made by engineers. Unfortunately, few Dutch members of parliament were and are engineers. To my great disappointment, technology lost its importance and the word 'techneut' (boffin) was made up to rob engineers of their standing. We entered the era of the managers, who were not required to know much about technology, yet still made all the decisions in this field. The consequences would soon be felt. Magnificent laboratories were closed, interest in technical studies waned and innovation suffered.

When it finally became apparent that innovation is a very important pillar of our wealth, state commissions were appointed to stimulate innovation. For a long time, people did not understand that innovation is connected to good engineering degree programmes and sufficient numbers of engineers, who are not led by jurists, sociologists, economists, etc. The appreciation for the field of technology seems to be growing, however. Nevertheless, the contribution of Prof. Han Vrijling, in Delft Outlook 2013.3, shows that the expertise of engineers in their own field is still not recognised and valued. When will this change?

The same journal contains an article by Saskia Bonger, entitled 'Muurvaste Protheses' (Solid Protheses). A beautiful story about innovation, which, in this case, is not led by managers with a law or financial degree, nor by sociologists. Nevertheless, the article opens with "Delft boffins and Leiden doctors", which deeply disappointed and disturbed me. Why should we engineers be called boffins in this article? I find that word derogatory and propose that it be banned, at least from the Delft Outlook journal.

Dr. C. Spaans