





Researcher:

Alex Barnes
DPhil in international development

Business:

Lanterne

## The project idea

lex was still reflecting on his experience in Afghanistan as analyst for the Australian Department of Defence and on what could be done to improve the safety and risk-awareness of the NGOs working there, when he started a Master in Conflict Studies at the London School of Economics (LSE). There, he met Yohan Iddawela, who had also been in Afghanistan and had noticed how people working there, especially for humanitarian reasons, were not as protected as they should have been. They bonded on this common interest as they moved on onto PhD programs, exploring ideas to improve the safety of workers in Afghanistan – Alex had been very well-prepared and protected by the government, but Yohan – an international worker – had almost no protection. Alex decided to embark on a DPhil in International Development to analyse how businesses deal with conflicts happening in their country, while Yohan remained at LSE to complete a PhD in Economic Geography.

In 2018, as they were progressing in their respective PhD programs, they came across new ideas that inspired them to create an enterprise out of their desire to make people in conflict zones safer. On the one hand, they learnt about the impressive developments in machine learning. They had seen how the introduction of AI was leading to advances in financial and medical services, and they were excited by the potential that big data had on enhancing people's safety in zones of conflict and crisis. On the other hand, they also became familiar with the concept of social enterprise and realised that businesses could contribute to address social issues. After some months of reflections, they came up with a well formed idea: they would leverage machine learning to spot safety risks in Afghanistan and transmit that information to people working in the country for humanitarian or business reasons through an app.

Over 2018, Alex and Yohan gradually built a team of five people, mostly working pro-bono out of personal interest, and Lanterne was founded in January 2019. Lanterne is a social enterprise, and its key goal is to help NGOs, charities, businesses and other interested individuals and organisations to plan the safest routes and ways to conduct their work in fragile states based on ongoing safety risks and areas of conflict.

Authored by Dr. Tanja Collavo

As they were developing Lanterne's underlying idea and service, Alex and Yohan began paying attention to all entrepreneurship competitions and opportunities that were taking place at their universities and they also searched for grants from other organisations that might be applicable to their idea. They started their quest mostly by looking into student competitions and government-backed grant programs, which they thought were the most applicable to their venture and the easier types of seed funds to get. By applying on average for one grant every two to three weeks, they were relatively successful in securing some funds and, now that Lanterne is growing, they are turning their focus to private funding.

Proactively searching for such funds and participating in competitions has enabled Lanterne and the value of that idea to get noticed. Soon after its set up, Lanterne won the Oxford Foundry All Innovate Competition prize for Best Postgraduate Idea in February 2019 and the London School of Economics Generate Competition in March 2019. Helped by this recognition, Alex and Yohan applied for the Santander Entrepreneurship Awards. This competition, for which they were among the finalists, gave them the opportunity to attend an accelerator week, where they met other innovators, businesses and received support to continue expanding their project.

The seed funding and feedback obtained through these competitions, combined with the teams' grant applications, was pivotal in developing the idea further and in receiving more significant grant funding and in-kind support from the Big Data Corridor, the European Union and from the European Space Agency, which awarded Lanterne a £41,500 Incubation grant for conducting research and development. Following these achievements, Alex, Yohan and the rest of the team are now working on building the minimum viable product of the app, and they are planning to launch a pilot at the beginning of 2020.

While working on Lanterne every night and weekend, Alex has been developing his knowledge of conflicts and his business networking skills through his DPhil project. He has been conducting research in Colombia to understand how local businesses, working in different sectors, deal with conflict. He chose Colombia because of the prolonged civil conflict that affected it and the variation available across sectors and businesses in terms of development and in terms of level of conflict suffered in different areas. While the current research is not directly focused on Lanterne systems, he is still gathering helpful knowledge about the needs of organisations operating in conflict areas and he is gaining skills that are instrumental to generally attract stakeholders into a project.

Having to combine DPhil commitments with an entrepreneurial endeavour helped Alex to become more efficient and to focus his mind on what really needs to be done.

In terms
of knowledge,
the chance
to talk with
businesses that have
experienced conflicts
is providing Alex

with insights about problems that they have faced and that, therefore, might be faced also by organisations in Afghanistan or other conflict areas. Additionally, his DPhil project is giving him the chance to compare different forms of conflict and their impact across regions. The knowledge acquired might inform the further development of Lanterne in the future, albeit indirectly

In terms of skills, Alex is developing his networking and negotiation skills. Gathering information about conflict is difficult, since not many people are willing to share what they have gone through or how they have dealt with it. Alex started his project asking the help of two Colombian universities – Universidad EAFIT and Universidad ICESI – and reaching out to local Chambers of Commerce in Colombia and to large businesses operating there, leveraging the value of the Oxford brand. Thanks to the help of these local actors and to word of mouth between them and their contacts, Alex slowly managed to obtain enough interviews to put together a valuable dissertation and to develop negotiation and information-soliciting skills that are going to be helpful also for Lanterne.

His data collection experience made him aware of the time it takes to develop a network but also of how, once the ball starts rolling, contacts and interested stakeholders start to join and get in touch at an increasing rate, to the point of almost having too many to keep track of. It also made him aware of his desire not to be extractive when receiving the contribution of interviewees and other stakeholders. For this reason, in the last year he has been thinking about what approaches might be best to transform connections into collaborations. While he still has to come up with an answer and he is starting to consider if Lanterne could be used for such a purpose, he has agreed to co-author a paper with a professor from ICESI helping him, and he is planning to write a report for the Bogota Chamber of Commerce. This way, they will be able to disseminate the best corporate responsibility practices that he identified through his research across the many small and medium enterprises that they support.

Having to combine DPhil commitments with an entrepreneurial endeavour helped Alex to become more efficient and to focus his mind on what really needs to be done. He became very good at scheduling as many interviews and meetings as possible in any given day and he kept his supervisors regularly updated as a way to ensure he would make progress in the DPhil project. In the meantime, one of the keys to the current success and development of Lanterne has been communication. Alex and Yohan set up Slack to create a 24/7 communication channel with the rest of the team and they share daily the issues that they are facing, what they are working on and what needs to be done. They also work hard to ensure that the workload is evenly distributed and

that everyone is on board and happy to keep contributing. According to Alex "without a regular communication channel such as Slack, the daily updates and the organisation of information that it enables (e.g. they have a separate channel for each topic such as contracts, research and development, etc.), keeping on developing Lanterne while working on other projects would not have been possible for the team".

Both Alex and Yohan are spending 40 hours each working on their business idea, while keeping on committing full time to their PhDs. The Chief Technical Officer Sebastian is working on Lanterne full time. While Alex does not mind the long working hours, he is a little regretful that while he was doing fieldwork he missed out on the cultural experience in Colombia, since he had to use all the potential free time to work on Lanterne. However, he believes that this was worth it. Moreover, to get the project going, they have recognised the precious help of their CTO, who is working on the project full time without a salary, by making him a third co-founder. Seeing what they are creating every day and receiving the encouragement of an increasing number of funders and stakeholders, including the other team members who work hard to combine their support of Lanterne with other commitments, is a strong incentive and makes any working night or weekend possible and not too burdensome.

As Lanterne keeps developing, new challenges lie ahead. Alex and Yohan are now searching for partner agencies who might be interested in conducting a pilot phase with Lanterne, while preparing for a private equity funding round, and working alongside Sebastian to build out the final set of Lanterne's features for the full version release. But as the stakes increase, so does the excitement.

## Key benefits & challenges

ccording to Alex, working on launching a start-up is a great experience. It obviously requires a significant effort but also enables you to meet and work with wonderful and interesting people, such as Lanterne's team members. Every challenge has to be addressed by the core team, which is daunting, but also exciting, as you always learn something new.

Another benefit of starting an enterprise is to be able to do something creative. You are trying to 'discover' a new product, and you need to think hard about the end-user. This type of creativity is usually not a part of the DPhil training but benefits an academic career too by instilling attention for other people and the circumstances they live

in when collecting and analysing data, which ultimately benefits the quality of the findings. In the case of Lanterne, Alex feels that the work has been not only creative but also meaningful, as this venture has the potential to save lives.

The soft skills gained through Lanterne helped Alex to make the most of his data collection skills. Conducting primary market research for a business is very similar to conducting academic interviews, you must approach each interviewee with an open mind, listen carefully to their views and faithfully record the results.

At the same time, it is very challenging to make decisions, because there are no safety nets. Especially as researchers, the tendency is to be risk-averse and to keep gathering as much data as possible before jumping to conclusions. However, being an entrepreneur requires the willingness to make quick decisions, while also trying to be as informed and considered as possible. For example,

Alex and Yohan have previously delayed their outreach to customers due to a concern about refining the product. With experience, they learnt instead that it is generally better to engage early and often with potential customers in order to co-develop the product and address its shortcomings with their support.

Another challenge for Alex and Yohan was to find the necessary team members to transform the Lanterne idea into an actual venture. They spent a lot of time reviewing profiles and meeting people, and finding the right cultural fit was key. A similar challenge occurred to Alex almost at the same time when having to negotiate with researchers in Colombia to establish the terms of his visit and of his collaboration with them. In the end, in both contexts what worked was ensuring that the team members' or collaborators' had the necessary skills to execute the work, and that their values aligned with the goals of the project.

## Advice for other researchers

eciding to collaborate with businesses for research purposes or starting up an enterprise is difficult and it will take significant effort and time. For this reason, it will be very important to be passionate about the project, determined, and to persevere, no matter how many obstacles might arise. In the end, it will be worthwhile!

Good time management and communication will also be key. Any person who is involved in the project, such as your team, business partner, investors, advisors, beneficiaries, should be frequently kept updated about what is going on. This way you can receive their input and feedback as well as sustaining their engagement and support, which are fundamental for any project to succeed.

You should not be shy in looking for opportunities and for help. "We have applied for any competition that came up in one of our universities and spent several hours a month looking for grants, advisors and potential team members, and only in this way we got the necessary seed funds to develop the idea". Based on Alex's experience, the Oxford Foundry is an excellent place where to start looking for help and advice. Another effective way to get the necessary advice is to attend events and talk to people about your idea whenever possible. It is not necessary to have all the answers about your project to start a conversation around it and fellow business people and researchers are likely to have helpful ideas and connections, as well as knowledge of useful opportunities. This can be true both for entrepreneurial and research purposes.

Finally, Alex offered some advice for setting up an enterprise. Firstly, do as much investigation as you can to validate your idea by talking with your potential customers. Second, plan out your start-up process, and develop a mission and vision that you truly believe in. Finally, be open to changes and ready to adapt, as you may be surprised by the opportunities and challenges along the way, which will alter the direction of your business.

