

ZORIN POST PUMP



Enterprise

Introduction

Phil was in his final year of his Product Design degree at Bournemouth University. Along with his course colleagues Phil was tasked with a problem; to come up with something new and useful. His hobby was cycling. One of the problems that cyclists faced concerned the cycle pump: being secured to the frame it was always on view and was a target for thieves.

Phil decided to concentrate on solving this problem “Where to hide the Pump?” He had an inspirational moment! He would put it in the seat post of the frame of the cycle! Fired up by his idea Phil began to work on a prototype to present as part of his assignment. The more he thought about the pump the better it became. Eventually in just over five years, it has become an internationally selling product. If you would like to learn more you can visit www.zorinpump.com.



Issues

Funding

For the first few years funding was the hardest part of Phil’s business venture. He needed to pay for his Intellectual Property protection and for all the design and research that was required. Later on he had to produce prototypes to show potential customers; an expensive undertaking. He had offers from people who call themselves venture capitalists or business angels, they would have given Phil the money he needed, but at a price. In return for their investment they would have wanted to part own Phil’s product, maybe even half. He asked himself “Do I want 100% share in say 1,000 units or 50% share in a million units?”.

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Development

One of the first things that Phil did after filing his patent was to set up a business and become a sole trader. As we all know if you have a business it has to have a name. Did the name Zorin seem at all familiar? It could have done, as it was the name of the villainous company from "A View to a Kill" the 1985 Bond film starring Roger Moore and Christopher Walken. Phil is a huge Bond fan (with the Q factor shouldn't all inventors be?)

This was one of his favourite films and Zorin was an in joke between his friends. Hence when he began to consider a name this was the one that jumped out at him. He would like to point out though, that he is not a crazed megalomaniac psychopath with evil plans to destroy silicone valley!

Phil urgently needed a financial injection to continue with his product idea. He conducted some research into funding. It was the DTI Smart Grant that he eventually applied for, which is a government assisted loan, the idea being that it will help people like Phil with a good idea for a business, but who need the money to set up.

It was hard work to get the grant as Phil had to prove on paper that his idea would work. When eventually the grant was approved Phil was delighted. He had the funds to continue developing the product and to get it ready for production.



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Working with partners

It was fortunate for Phil that he was introduced to a company called Des Tech. Firstly, they helped develop and design the pump, so that it was ready to be manufactured, including producing the prototypes allowing potential customers to view an actual item rather than relying on the powers of their imagination. The people who work for manufacturers, deciding whether or not they want to buy a product may work in the licensing department. Because they are not usually designers or inventors they can then struggle to envisage what this product will eventually look like. With an advanced prototype that they can hold it, play with it and even use it, the only imagination they need is to picture how it will look with branding.

As 'image' is very important in the bicycling community a crucial consideration in the development of the pump was how it looked. Visual appearance would be vital in this brand orientated world, to sell to both the consumer and any companies that would like to manufacture it. Of course Phil couldn't have considered showing his innovation to companies without the intellectual property protection or they could have taken his idea and profited themselves.

The other great thing about Des Tech was.....they blow things up! They conduct testing on domestic appliances and leisure products, before they go to market. This means they undertake destructive tests ie. they make things go bang! They managed to blow up an inner tyre with the pump, and so concluded that the pressure the pump produced was adequate!



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Protection

Intellectual Property Protection

The instant Phil decided his pump could become more than a project for his degree course, and that he could manufacture an improved version, his thoughts turned to intellectual property protection. This had been mentioned in Phil's degree course, so he understood how vital it would be to his business. Phil realised that without adequate cover in countries around the world, he may never make any money from his idea. His innovation could be copied, and he would have been powerless to do anything about it. As this was so important, Phil decided to hire a Patent Attorney. Although this would be expensive Phil saw it as an investment. Along with design and research, he thought it probably the most important way of spending his money. He now has patent protection in various countries including the UK, USA, Europe and Far East.

Research

Had Phil tried to get a patent on the first bike pump prototype that he produced in his final year in college, he would have been unsuccessful.

This was due to there being patents already in the USA with similar ideas. Phil knew this and also wanted to do more research to make his pump the best it could possibly be. By re-engineering the original pump he was making it unique and therefore patentable.

The re-modelling meant also that Phil wasn't infringing on anybody else's idea. He changed a few of the fundamental elements of the pump including an integrated air hose, folding foot-stand, the air-flow, some valves and the ergonomics of the pump.



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Publicity

From the very start, when Phil displayed his first version of the pump at Bournemouth University annual design show the pump received a lot of interest.

Once the patent had been filed, with the help of a friend, Phil designed a website for the ZorinPump. Even though it wasn't yet being manufactured people were enquiring about availability. Phil did start to wonder if they could perhaps produce a small number of pumps to satisfy this demand, but as the production process was so complicated, it wouldn't have been financially viable. Phil had to wait until the patent had been filed, before he could publicise his pump to full fill the non-disclosure part of the patent process. Otherwise once you have told people about your idea you cannot get a patent granted.

There was also considerable interest in the pump from the Media. Articles appeared in the "Newbury Weekly News", and "Bike Biz" featured the pump too. This led to another flurry of interest. Phil was also invited to show case the ZorinPump at prestigious event at Bournemouth University where HRH the Duke of Kent was the guest of honour. He asked Phil many searching questions about his invention sparking of more attention.



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Outcome

Production

Now that there was a working version of the pump, Phil and Des Tech felt ready to investigate producing it. Initial estimates looked as if £70,000 would be needed to set up production in the UK. This cost could have been slightly reduced in Europe.

But the most cost effective place identified for producing the product was the Far East where costs would be around 10% of that figure. Problems such as concern about overseeing production due to the huge distances involved kept arising as Phil looked at the manufacture of the pump. However he persevered, determined to find a way to make his plan work.

The market place

Eventually it looked as though all the endeavour that had been bestowed on the pump was about to pay off. Phil presented the prototype to a British bicycle and accessory distribution company and they said they would be happy to commit to a defined number of units. This was excellent news. The project then took an even more significant turn: Phil received an e-mail from Josh Hon, who works for Dahon® they had identified the Zorin Pump as having world wide market appeal!!

Phil's success

So how did Phil take his final year product and turn it into a profit making high profile product? Apart from the viability of the product, Phil's success can probably be accredited to a combination of his perseverance, firm decision making, surrounding himself by good advisors, and a little bit of luck!! He says "as you may have gathered I tend to undertake projects that excite me and in which I take a personal interest. To some extent luck has been an important part of my success to date, but as I see it, the harder you work the luckier you get!"



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Additional Learning

Dahon®

Dahon® are the world leaders in folding bicycles, and since the start of their business in 1982 they have sold almost 2 million bicycles worldwide. Their bikes are sold in over 30 countries. For more information visit www.dahon.com. In March 2006 the first bikes with this pump manufactured by Dahon® were arriving in countries around the world. An 'after fit' version of the pump is also available internationally.

