

Who is the Boss? A Role-play

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Who decides what to do when there are a number of options available for commercialising a technology?

This exercise is designed to help you understand how different stakeholders view the world and the different pressures on them.

You will be assigned a role and you will work with 3 other people in a role-playing exercise in which you will seek to reach an agreement that keeps everyone happy. You will have a brief that explains your situation, they will have a brief that explains their situation and you will work together to find an agreed way forward.

Good Luck

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The Situation

The inventor has come up with a new way of converting sunlight into energy through a clever new semiconductor array. Finally conversion rates are sufficient to make solar power economically viable in those latitudes that have big seasonal variations in sunlight intensity or significant regular cloud cover. In fact this technology shows peak efficiency in cloudy conditions, which means that output stays relatively constant whether cloudy or direct sunlight, an extremely important factor for the energy planners and distribution companies.

This is a breakthrough that has caught the attention of a number of people:

- The research community and there is talk of the science itself receiving a prestigious award
- Multinational energy companies, especially the big players in the US and mainland Europe where the conditions are just about ideal for the technology.

A meeting has been called to discuss the best way forward on this technology involving:

- The University Vice Chancellor
- The Economic Development Agency account manager for the University
- The TTO manager
- The Inventor

This meeting must decide the action plan for the next 2 months.

Inventor (and her friend)

Dr Shona Bright has been working in this area for some 15 years. She has, by her own admission, been a bit of a plodder, rather than an academic superstar. However, she prides himself on the fact that 5 years into her research career she came up with an idea and now, 10 years later, it works.

She is quite enjoying the attention that this work is suddenly attracting, but also a little bit resentful that these people, who are now all over her, spent the last 10 years either ignoring her or giving her the impression that she was a bit of a waste of space. She has survived on small, basic grants, with a very small team of PhD students and technicians, stuck away in the bowels of the engineering department.

The only person who she thinks has understood her and stood by her is Jimmy Watt. They did their PhDs together and then Jimmy went off to be some sort of high flier in the electrical energy industry. He has made a packet and is very, very comfortably off now. Despite their lifestyle differences, they have stayed in touch, meeting up once or twice a year for a pint when Jimmy was back in the country. From the very first time Shona told Jimmy about her idea (10 years ago) Jimmy has encouraged her to keep to it. He saw the elegance of the idea and also what a breakthrough the technology would bring to the energy industry. He saw global warming coming and knew that this sort of thing would be worth a fortune.

Now, since the technology looked like it was going to work (18 months ago) Shona and Jimmy have been thinking about the commercial opportunities it might bring. Shona doesn't want to go all commercial (she's just getting used to being respected as a scientist) but she can see just how excited Jimmy is and that is starting to rub off.

Jimmy sees this as his big chance. He has had a successful career and put a few quid aside for a rainy day, but he feels unfulfilled in the big company environment – just another rat in the race. His life is, he believes, a fur-lined rut. This technology would give him and his pal the chance to create a new company that could grow to be the greatest energy company in the world – creating and distributing cheap, reliable electricity with no carbon footprint. A chance to change the world, save the world and make a huge pile of cash – with his old friend.

He knows that other people see the potential too, but he has an edge on them. Shona was kind enough to list Jimmy on the original patent as a co-inventor, because of his intellectual input in all those pub conversations.

The two now plan to tell the University that they intend to form a spin-out company. Shona has the brains, Jimmy has the business knowledge and a great network of contacts in the energy industry. He already knows some money-men who are keen to back them to set up the company in Eastern Europe, where they have the money to invest from oil revenues and a real desire to replace the oil industry with renewables. They have the money, the markets, all the research facilities they need and good labour costs.

All they have to do is agree an equity position and royalty rate with the University and they're away.

The Vice Chancellor

Sir Cadian Rhythm has been VC of the University for two and a half years. He is about halfway through his tenure and has been feeling a bit deflated. His first hundred days came and went in a blur as he came to realise just how complex the university is and how painfully, painfully slow it is to make anything happen. He ordered a new desk when he started and it's arriving next week.

He always knew it would be a change, coming in from a senior position in the motor industry to running a university, but he hadn't realised just how little executive authority university executives seem to have.

His governing body have been at him about the slow rate of growth of the research base and, especially with all this impact agenda, how little industrial collaboration the university has or international profile. To make matters worse, the other university across the city has just achieved major bragging rights by selling a patent, or royalty stream or something to a major Pharma company for £30m. Sir Cadian's own royalty stream appears to be static at £300k and showing no sign of shifting.

Today though he is feeling quite chipper as he knows he is going to a meeting to discuss a technology and, in particular, how to develop and take a technology forward...his own comfort zone. He doesn't know a lot about it, but he chatted to the inventor at a reception recently and it seems to be an excellent way of turning sunlight into electricity. He knows that in the olden days he would have known the technology inside out, but there simply isn't the time between the committees and engagements.

He knows also that the Economic Development people are going to be there. He gets on very well with them, but they rarely seem to have very much to talk about. They seem quite excited about this one. He hopes that whatever comes from it will satisfy the governing body.

The Economic Development Agency

At last this great and august university has come up with something that might make a difference. For 5 years Helen Paterson has been account managing the relationship with the university and she had almost given up in despair.

£200m a year this place spends on research. You would have thought that would convert to a lot of inventions and a lot of commercial opportunity...., but oh no. In some parts of the university she knows that people run away and hide in their offices when she is around. But why? She knows that the university does fantastic research and she just wants to see it turned into social or economic benefits to the region.

The only time she has people wanting to talk to her is when people want grant money from her.

Well here, at last, it looks like there is an invention that might have some real potential and not before time. Helen's targets for job creation have not been achieved and the number of spin-out companies is woefully low. Here we have the chance to create a real spin-out with rapid growth and even some high tech manufacturing.

She knows the energy people in the region well, especially the oil and gas people and she's hoping that with EDA grants and some support for early stage management that we can interest the local venture capital community to come in alongside and turn this into a global player based here in the region.

The TTO

Oh dear.

The technology is fabulous and the sort of breakthrough you've been dreaming of as you sat in ASTP conferences hearing about everyone else's success.

The Vice Chancellor wants to be involved, it's so big and you know that there are several really exciting options to consider. But you also know that getting an outcome that keeps everyone happy is going to be one big task.

You know the patent is sound, but there's that issue of Jimmy Watt being a joint inventor. When Shona first brought the disclosure forward and explained that this was a long term collaborative partner you didn't think much about it really, it's quite common. But this is someone who works for a major energy firm and you just know that, at some point, if this gets big, that company is going to have a go at claiming some rights to the IP.

Of course that same multinational company is one of the ones interested in doing a deal around the technology and you don't think that they are aware that one of their employees is named on the patent as James Watt is a common enough name and he gave his personal, rather than company details.

This company, and a number of others are making really positive noises about doing a licence deal with a major research component. This would tick some boxes for the University in terms of reputation for industrial collaboration and the fact that it's international just adds to the attraction. You think you could get a multi-million pound research deal (AND A BUILDING) out of this one as well as a small, but ongoing royalty rate and a company that you know has the muscle to take this thing to the marketplace. It's a pity that none of these companies are based in this country.

On the other hand, the Economic development Agency are banging on the door with offers of support for setting up a new company to exploit the thing through a local spin out company. "Local investment for local jobs" is their motto and they think they can help turn the technology into a smash hit and the biggest thing to hit this country in decades. Now the government would LOVE to see that. Their poll ratings are soft and they keep saying 'it's the economy stupid', with an emphasis on the stupid, every time they speak to you. To be seen to be saving the local economy would be extremely nice right now, since government research funding is shrinking. This would give everyone a boost and make the Vice Chancellor's pleas to the government for more investment just a bit stronger.

But then Shona and her old pal have other ideas and seem to have developed what might be a really workable plan. They have investment lined up, the E. Europeans seem serious about this and they have the money to make it happen. You're not clear on what it would mean for Shona and are very concerned you'd lose her, just at the point where she becomes a star. Jimmy Watt has already suggested that the royalty rate would be pretty generous as he knows there can be no sign of tension with the University or his funders will walk. The sorts of rates that he's talking about would start to generate very big sums round about year 4 and, if things grew the way he's

convinced they will, you could be looking at tens of millions a year shortly thereafter....you might even come out top in the ASTP licensing survey.

Oh well, time for the meeting.