Peter's story

1. The invitation

Just before the end of the first term of my final year as an undergraduate in the Department of Communication and Computer Engineering, my Head of Department (Professor Brian Healey) called me to see him. He suggested that I should consider staying on for a PhD, as my final year project was of great interest to both the Department and his own company.

- Q1 Comment on Professor Healey's suggestion
- Q2 How should Peter respond?

2. The improved offer

Although I was flattered, I wanted to get a job, as the market was desperate for engineers with experience. So I said I would think about it.

But midway through the second term I was approached again by Prof. Healey. This time funding was mentioned. The offer was an EPSRC Case (collaborative) award, with Prof. Healey's company, Healey Communications plc, as the industrial sponsor.

Meanwhile a company in Reading had just given me a very good job offer. When I informed Prof. Healey of this, he seemed rather put out. Probably as a result of our conversation, later that week one of Prof. Healey's employees contacted me with the intention of convincing me to stay. I was still not convinced, as I really liked the job offer.

A few days later I was contacted again with a request to see Prof. Healey. We had another meeting and he offered me a large increase in funding: £7000 p.a. provided by the Company.

Q1 Comment on Professor Healey's offer, and on the academic and financial arrangements implied.

Q2 What should Peter do now?

3. The choice of a PhD topic

After a long discussion we finally agreed on a sum of money (£8000) with an assurance of a minimum commitment to the Company.

I accepted the offer. I thought that it would be a good decision, as I would be paid while I studied and I would not be committed to work for them afterwards. It was agreed that Simon Elliot (a new lecturer) would be my first supervisor and Prof. Healey my second.

After graduation (with a 2:1 Hons.) I took one month's holiday. Then in August I arrived to start on my PhD and joined the 25 other research students and assistants working in the Department partly or wholly funded by many of the major companies in the computer industry.

I settled into the office and continued to read around the general area of my final year project - the area decided for my PhD. After about a month I was trying to understand why a well-published architecture was seen as the ideal solution to the next generation of communications technology. And I soon realised that I was on to something.

I began to analyse the suggested ideal solution to the problem. At this stage I had not been given any supervisor guidance. I discovered that the suggested solution was not only pushing the technology to its limits, but its large physical size and huge power consumption would far outweigh its benefits. So I decided to find a better solution and made this the main topic of the PhD. I informed Simon of this and he sounded very positive.

After approx. two months I came across an alternative solution - a relatively new technology, which could be used to dramatically improve the suggested ideal architecture. After some further reading and sums, I decided to present this alternative to the Prof. and the Company as the topic for my research.

However, the reception at the meeting was very negative. It is my feeling that, as it is not their specialist area, neither party really understood what I was suggesting. My suggestion was thrown out and I was asked to look at another topic, which was given to me. The new topic was not something that I was familiar with. So rather than question it I went away to read up on the area.

- Q1 Discuss the PhD recruitment and selection process in the Department as experienced by Peter.
- Q2 How should the topic of a sponsored PhD decided? What part should the sponsor and supervisors have in that decision?
- Q3 How should Peter respond to the suggestion that he 'look at something else'?

4. Recognition

I conformed to their wishes and researched the new area during the day, but in the evenings and at weekends I continued to develop my own idea. This went on for some weeks until I had produced enough evidence to present a paper on this idea at the Annual International Symposium on Media Communications Engineering.

Once I informed Prof. Healey that my paper had been accepted he showed some interest in my idea again. But, once we got down to the complex requirements for development, this was short lived.

But at the Symposium the paper produced a great deal of interest from many of the delegates - and continued to do so. For instance a large chip manufacturer got in contact with me and showed interest in helping me develop the idea.

When I mentioned this to the Professor, he said that he was unhappy with me communicating with this company and said that I should pass the details to Healey Communications. I decided not to, because they didn't understand the idea and they have a reputation for trying to bully companies into investing money. This was a very delicate contact and going in with a hard sell attitude would have just scared them off. Professor Healey also stated that any IPR would belong to them and they were not interested in sharing it.

This statement convinced me they had no idea of the project's concept, as the project could only be a success with a chip manufacturer's help. And I had signed a form at Registration indicating that the University owned the IPR of a PhD student's work. But it now appeared that the Company was assuming they owned it.

Q1 What arrangements should have been made about the IPR? What are made at your institution? Who monitors them?

Q2 What should Peter do now?

5. Rejection

Leading up to the end of my first year I wrote and presented another conference paper on the potential of my suggested new architecture. This prompted another meeting on the subject with Healey Communications. This time Prof. Healey brought the other Company Director in to discuss the situation.

I provided a report including an outline of the resources I needed to start development on my idea. But the investment was seen by them to be too expensive for Healey Communications as it is only a small consultancy firm. So once again the idea was thrown out.

Soon after that Simon gave me another area to research - which proved to be as unfruitful as the previous work given to me by Prof. Healey. Meanwhile I have written and submitted a third paper on my own idea and submitted it to a professional journal for publication. This paper provides further evidence that not only is my idea efficient in respect to physical size and power consumption, but also the technology is already available to produce it.

Since then I have proved that the new area given to me by Simon has a detrimental effect on the overall system's performance.

- Q1 Refer to your Postgraduate Handbook(s), Guidelines etc. What rules can you find to cover this kind of situation?
- Q2 What course of action would you recommend to Peter?

6. The end of the line?

I am now four months into my second year and there has been no change in attitude. I have suddenly been asked to meet with the Company to discuss how I can provide some value to the Company! If providing them with the idea and know-how to produce the first efficient and practical solution to a major problem is not good value, I don't know what is!!

On an academic note, my conflict of interest with the Company and the Prof. has clearly affected my research, and, if it wasn't for my belief in the idea, I would not have published any papers. Incidentally, Simon has been less than useful as my first supervisor, because he is kept so busy with other work provided by Prof. Healey.

As a result of this I am now in contact with another company interested in employing me to work with a team of professionals on my ideas.

So I have finally decided that the PhD is not important to me. But I have not yet told the Company that I intend to drop out, as they would only make my life a misery until the day I left. I have thought of making a complaint, but knowing the way the professor has reacted in the past to complaints, I would rather leave it until I have left.

I wouldn't recommend anyone to take on a PhD, particularly if it was a Case Award. It occurs to me that the term 'Award' is rather inappropriate in this case.

- Q1 Comment on <u>your</u> University's policies towards PhD students on Case awards or sponsored by a company.
- Q2 Could they have prevented the same outcome?
- Q3 Did Peter have cause to make a complaint at any stage? If so, how and to whom?
- Q4 If you had been Dean of Postgraduate Studies at Peter's university, and had heard that Peter had withdrawn after 16 months, what actions would you have taken?

Team task

On the acetates provided list the main lessons here for

- a) New postgraduate students
- b) Supervisors of sponsored PhD students
- c) Universities with a policy of developing a closer relationship with industry
- d) Companies considering working with universities
- e) Research Councils fostering the development of those relationships