

## **Mike Fischer, Serial Entrepreneur**

### **A valuable beginning**

Mike Fischer tells his story: When I was seven, my father took a job with the International Atomic Energy Agency, in Vienna. I lived there for several years, then came to school in England, spending nine months on a farm in Rhodesia before studying physics at Oxford.

I expected to become a professional physicist but quickly realised that I was not one. My hobby was electronics and I was always fascinated by what made organisations run so I decided to apply my electronics and resourcefulness to start a business.

First, I got excellent advice from a friend: before getting 'nailed to the ground' running a business, I should spend two years travelling. So I went back to Zimbabwe for two years and did various jobs – valuable experience.

Being brought up in more than one country influenced my view of the world in two ways. First, I realised that what was seen as right or wrong depended on one's perspective and I became suspicious of judging peoples' actions without knowing that perspective. Second, I saw that, because Rhodesia was run by its small white population, businesses were small too. Dealing with any business you could see how few people worked there and that made starting my own business less daunting. Of course, as a white person in rural Rhodesia, you also had tremendous responsibility when very young. That developed resourcefulness and competence – being in charge.

### **Finding one's feet**

I love Africa, but the beginning of civil war brought me back to Oxford, where most of my friends were. To earn cash, I worked as an electrician and ended up at Russell Laboratories. They needed a new type of electronic instrument and I quoted for it. I then met Michael O'Regan and we built this instrument together, living in Oxford and both working part-time at the telephone exchange.

Soon we went into the hobbyist kit market. As a hobbyist, I noticed that people who began with small advertisements for kits clearly survived, as the adverts got bigger over time. My idea was to do the same and, within a few years, raise enough capital to go into manufacturing scientific equipment.

So Michael and I set up a business - Research Machines (RM) – with no capital! I had £100 a month from Dad for a year and a small wage from the telephone exchange and, without families, we lived cheaply. The mail-order business grew to a reasonable size and we accumulated some capital. We then decided to go into making a micro-computer. The product of the moment, few were being made and most were very amateurish. So we began to design them, shipping our first in 1977.

### **The Schools Market**

That computer went to a customer working in information technology in the Reading local authority where a group of people in schools had designed a computer from parts we sold them. So we persuaded them to let us design another computer for them because we had more expertise. We had decided already to stay in the education market because we did not think we could grow fast enough to be significant in the business market. That put us in a less exposed position when IBM moved into the microcomputer market in 1981.

To start with we had enough cash to order parts for 250 computers and so that is what we did. We actually sold the 250 computers in the first year - but by coincidence. And they were quite profitable - our gross margin was about 50%.

As we started on computers, a friend helped us with the firmware, and so we brought him into the business. - then fell out with him. Having given him a one-third share in the business for no charge, we had made it a quasi-partnership and could not fire him. We had to buy him out for about £1.5 million, but the business was now growing rapidly and we had to raise, through venture capital, roughly what we paid him.

In 1977 we employed seven people but, within two years, were close to 50. No longer a small business we recruited a very good electronics manufacturing director and used his skills to recruit other senior managers. We thought they would show us the best way ahead for electronics manufacturing in the late 70s but, while they may have understood modern management as then practiced in the UK, I soon came to the view that we had to learn from the best practice in other countries.

### **Learning to learn**

Michael and I accepted we did not know quite what to do either, but that we would probably do better if we did! Now, we bought disc drives from BASF so about 1982 I visited them to see how German manufacturing was done, but I learned little.

Soon afterwards, I learned much more with an American venture capitalist friend, who came to the US with me on a fantastic trip, which he arranged. We visited twelve high-tech companies - some where the founders had been successes, some where the original founder was gone, and I learned that half the engineers starting US companies failed to learn how to manage them.

I also learned that the really successful companies were Japanese, whose success the British attributed largely to 'quality circles'. Going to British quality circle' courses, however, did not help me much. So I focussed on asking American, German and Japanese businesses how they dealt with quality. The American answer was useless: they had no real method. German suppliers just thought they were inherently good at making things.

Then, at an exhibition in the States, I asked some distant-looking Japanese engineers how they would validate engineering changes and their eyes lit up. They showed me a laboratory notebook with page after page of tests they did every time there was an engineering change. We had all been looking for over-sophisticated explanations of why the Japanese succeeded.

So I talked, very practically, with the CEOs of major Japanese disc-drive manufacturing companies and found they had a very specific methodology. Anyone could have used it, but only the Japanese did. And it had really been developed by two American engineers in Japan – Deming and Juran. Yet American manufacturing industry was being decimated, because no American CEO would spend long enough in Japan to find what they did differently. By the 1990s US firms either had learned how to achieve high quality as easily as in Japan, or disappeared. But they had lost a decade in comparison to the Japanese.

As for me, during this process, I had learned that, being a young man (born in 1950) quite senior people in divisions of American hi-tech companies divisions would give me quite a lot of time - that people who are really good at their jobs and have thought a lot about them, will help you a lot. Yet few people came to question them.

### **Growing successfully**

Many of these US companies had between 1,000 and 5,000 people and I wanted to understand how they had made the transition from 50 to 5,000. Almost all went through the same process, recruiting the wrong managers at around 50 employees and running the company the wrong way: they did not understand integrated management, which is what you have to use in relatively large companies. Then they ran into a huge crisis somewhere between 100 and 300 employees. Now, half chief executives are good learners - better than their managers - so the CEO fired the managers and hired good ones. Running any hi-tech company is difficult and running a fast-growing company is **very** difficult. Putting the two together, you need very experienced managers.

We were then about 50 people and I could see these emergent problems but my intuition of the solution was very different from what my UK experts told me. I saw clearly that the problems with a company of 50 are exactly the same as with a company of 1000. So if you have 75 people what you need to know is what will be the problems when you reach 1000. It did not seem to me that there was a 'second transition.'

Going back to learning, I read Warren Buffett's *Letters to Shareholders* in the mid-80s but not until 1992 did I really comprehend what he was saying, especially about the difference between a 'commodity' business and a 'franchise' business or about how to manage a business to make sure that it really is cash generative.

My learning those lessons coincided with the development of the IBM-compatible PC into a modular product, so that you could just buy in the parts. So in 1992 we restructured the hardware part of RM from design and manufacture of modules, to simply designing the final product to be assembled from modules made elsewhere. At the same time this allowed us to apply some of Warren Buffett's perspectives, and to create a business that was inherently cash generative, and potentially more profitable. It was horrible, but it worked, and RM immediately became cash generative, and more consistently profitable.

Mike O'Regan was (is) a very versatile manager. He never aspired to be a functional head and yet, whenever any function had a managerial gap he would temporarily take over and get things under control. And he was a good board member. But when these redundancies came he decided to become a Non Executive Director.

Soon afterwards we went public, but someone else had to be chairman from then on, because the City did not like the Chairman and CEO roles to be combined. So we appointed and still have an excellent person, John Leafield, as Chairman while I became CEO.

I was pretty tired after 25 years as CEO and had never succeeded in moving RM into truly being one of Warren Buffett's 'franchise businesses'. We were always only marginally profitable. This was partly because so much revenue came from PCs - a commodity business where we competed at a disadvantage - and partly because so much of our business was in education, where we sold quality and service to customers who were not traditionally in a position to pay for such things. Being CEO had always been a stressful - especially in the middle 80's, when I thought our chances of going bankrupt were very high. So in 1997 I left the company - apart from a titular role. RM then had about 1000 employees, some 720 of them permanent, an annual turnover of £110 million and a stock market value of £150 million.

### **Serial venturing**

I had, by then, bought a cattle farm in South Africa together with my cousin, and helped him turn it into a game park, as well as doing some underwater archaeology. I had also established the Fischer Family Trust which started major education projects to influence the way education was done in Britain. The trust is involved in three major education projects, one focused on early learning in literacy, one focused on all aspects of performance in a group of schools in Islington, and one project providing schools and Local Education Authorities, and the Department For Education and Skills, with the best possible performance data. In each case I was able to 'cheat', and headhunt people I had worked with before. Thus each of these projects is run, very successfully, with extraordinary little call on my time.

### **How to profit on the internet**

Around 2000, to help a friend who felt his small business was threatened by internet competition, I challenged myself to use some of Warren Buffett's ideas and come up with a business idea that avoided the difficulties of RM, and could also make money on the internet

My friend did not want my idea, but a nephew was trying to establish a tiny internet business: the lesson for him was that you can't run a tiny internet business successfully. **Any** internet business,

needs several people on each of three sides – software, finance and sales. So you soon have 15 to 20 people which would, in the early 2000s, have cost £1 million a year, though it may be less now.

To my surprise, my nephew was interested and we started from the idea that the internet would dramatically change the way people bought stock photography. If you are publishing a brochure and need a picture for it, you can go to an agency stocking pictures and buy one. We set up a quite different kind of stock photography business.

The original idea was that I would fund that for a year and then we would easily bring in other money. But, when it came to it, with the dot.coms having recently bombed, no other money was available. Yet I quite liked the idea of having no outside funders or directors and financed the business – Alamy - myself. It became profitable after four years. With three million pictures on line, we have arguably the largest contemporary photograph collection in the world.

We make no editorial judgement on the value of a photograph, only a technical judgement that it has been photographed at a professional standard. We just make it available and, if it is sold, we keep 30% of what the customer pays. We are implementing a series of ideas to use technology to help the customer see 'better' pictures near the beginning of their search. In trading terms, Alamy is a bit like a stock photography version of eBay, and in technology terms a bit like a stock photography version of Google.

The Warren Buffett 'franchising' element here was that ultimately people buying pictures would go to a small number of 'portals' and, if you could become one of those, you would not compete on price, but other things.

We employ 35 people in the UK – and others in India. I am Chairman, with my controlling shareholding, and my nephew is CEO. We did not take the VC route, because this allows us to make 'lifestyle' decisions. The CEO and I do what we please. Now 30, just married without children, I have told him to take three months off each year to do things before children arrive. That is not an economic decision. But the business is profitable - we expect to reach an ongoing rate of operating profit of about 10%. The plan is to spend £1 million a year from Alamy on medical research.

After RM, I had a few quite easy years. Then a few years ago a relative got cancer and, being semi-employed, I spent a lot of time on that, later going on to apply my entrepreneurial skills to cancer research, but not commercially. So I direct a small team of people in St. George's Hospital Medical School, under the leadership of Professor Dalglish, and I am extending that work by building up a team in Oxford. We are working on using the immune system to treat cancer. We have been running our first clinical trial for about two years, with very good results. One thing leads to another, and I have also got involved with Dr. Steve Ray, who had made some startling discoveries in stem cells, and who needed some help in taking his discoveries forward. We set up a commercial company, Ribostem, for this, partly so that Steve could have a chance of getting some material benefit from his work. Some of our stem cell related work seems to have led to a surprise discovery to do with DNA repair, with implications for cancer treatment, and so we are pursuing that as well, but on a non-profit basis.

### **Key lessons**

Lastly, there are three things I learned from RM. First, doing your homework – learning from others - always pays: failure to do it wastes much time and effort. Second, the Japanese quality lesson: you need procedures that are very robust. Without them you progress much more slowly – yet most people don't have them. Third, the quality of project management alters the productivity of your engineering by a factor of two or three. Finally, to be successful, an entrepreneur must be a thoughtful learner.

*Douglas Hague, June 2005.*