



Teaching Case Study:

Red Rhino Crushers Ltd



Red Rhino Crushers Ltd

Origins

Red Rhino crushers emerged from a previous two-man business, Tiger Sales & Marketing (TSM), which manufactured concrete batching plant. Charles Crawley, a designer at the time aged 52, and apprentice-trained engineer Nat Connolly, operated this business from a garden shed, subcontracting the manufacturing to a company in Taunton. Their own role was sales and distribution and then the assembly and commissioning of the plant at the customer's building site.

Concrete batching installations were generally large, for which TSM received payment in stages, but by 2001 the business was noticing a significant change in its market. New entrants from Germany and Italy were introducing a broader range of equipment and were moving the market from one which demanded tailored batching plant to one which was more efficiently served by standardised offerings. Margins were dropping substantially and TSM needed to adapt.

A developing market

This was a market in which promotion and sales took place substantially through plant and equipment exhibitions, and TSM had spotted a gap and an emerging demand in the area of small crushers. These were machines which could be taken on to a building site and used for crushing waste material, such as bricks and blocks of demolition concrete, into a small size. The crushed product could then be reused as rubble within the site. Several exhibition visitors were telling them of their potential interest in such a piece of equipment. The advantages of this growing practice for the building business was that it saved the cost of transporting waste material away from the site, putting it in landfill and incurring Aggregate Levy.

At the September 2001 exhibition in particular in Paignton, Devon visitors were seeking a replacement for the very large concrete crushing equipment that was the only type available at the time. These were complex pieces of equipment, and very expensive to bring to site, demanding around 2000 tonnes of crushed material at the site in order to be viable.



Products exhibited by distributors including a 4000 series mini crusher

TSM went to work on designing a small, easily movable crushing machine and within a few months had built a prototype. Crawley and Connolly took the machine to potential customers in order to provide demonstrations on-site for them. This exercise quickly produced an initial five orders which TSM fulfilled. Three of these customers then suggested that the company should consider adding a larger model to the range, still easily mobile for towing by trailer from site to site, and they placed advance orders. Crawley and Connolly moved quickly to commence the design work and to complete the machines' assembly.



The 7000 series mini crusher

Financial requirements

TSM's area of expertise was primarily in the design and assembly of engineering products. Expanding the range of crushers, even in this relatively modest way, immediately placed demands for funding on the company which it had not previously felt. There was a need to take on a new site for factory operations, and whilst manufacturing could be subcontracted, the assembly work needed TSM to start building a small workforce. The initial plan was to have two further employees plus a full-time bookkeeper.

Free cash was relatively short within the business and so additional funding was provided by Crawley drawing on his pension plan and on an insurance payout which was due to him at the time. About £26,000 was injected into the business in this way.

Teething troubles

The development and launch of the new model of crusher did not go smoothly. Hydraulics were a key element of the TSM design, and gave many early problems and the new finance was insufficient to fund all of the ongoing work that it demanded. In 2002 TMC was approached by Heathway, a fibre-optic business which was seeking to diversify, which purchased a licence to manufacture the TMC machines in return for a royalty. This allowed the company to settle a number of outstanding debts with its suppliers and provided some relief from the other financial pressures. However the arrangement with Heathway was based upon an ambitious set of

projections which Crawley had proposed, including a forecast sales level of 200 crusher units per year. In the event Heathway managed sales of only 25 machines in the first 18 months of the arrangement and within two years the business had folded.



Demolition of old houses within new-build projects – on-site recycling by mini-crusher can generate large savings as the Aggregate Levy and haulage costs rise

In 2004 the business operations were returned under the terms of the licensing agreement to the company, now called TSM Technology, and Heathway withdrew from the business and subsequently went into liquidation.

Emergence of Red Rhino Ltd

The return of the business to TSM brought with it the up-to-date designs together with the relationship with the parts supplier and a stock of components which TSM was able to acquire at a liquidation price. Over the period of the licence agreement the company had decided to focus its attention on operating as a component designer on subcontract for other businesses. However upon the return of the business from Heathway, TSM decided in 2005 to add the manufacturing of crushers to its existing design and assembly activities.

A name for the business had emerged from the nickname of "red rhino" which their small crushers had acquired from their colour and their four-legged structure. Red Rhino Crushers Ltd was formed in 2004 and, as it commenced manufacturing, staffing increased to nine including the addition of Bob Luckman who had joined to handle administration. By September 2005 Luckman had put some funding into the business and Crawley, until then the 100% shareholder, had transferred a shareholding in Red Rhino to both Connolly and Luckman.

Widening the sources of finance

The business had by this time moved from Amersham to Chesham where it was occupying a small unit. Sales initially were buoyant and the business expanded into

the next-door unit at the Chesham site. Before long there was a requirement for further capital. Rather than seeking additional finance as before, the company put its demonstration machines onto a financing arrangement releasing capital from these assets. In addition it began a relationship with a factoring business, Fairfax Gerard, who would settle the company's supplier bills when due. Red Rhino then paid Fairfax Gerard for these, in addition to a service fee, once it had received income from its sales.

Red Rhino management focused its efforts primarily on manufacturing operations and therefore on volumes. Much less attention was given to management of the cash position of the business and an element of overtrading became evident. Crawley started to look for a substantial external investor, and advertised the opportunity in the national business press. This step produced four expressions of interest and by December 2005, agreement had been reached with one of these, Bradley Everett, to contribute £500,000 for a substantial share in the business.

Sales volumes – the critical issue

During this period the business again relocated, this time to an impressive premises in Aylesbury, and increased output to between 5 and 10 machines per month. Manufacturing volumes were ramped up substantially on the basis of strong sales forecasts, jumping to a level of 20 machines in May 2005. But the pace at which finished stock was leaving the warehouse showed these forecasts to be optimistic, with the last of May's production not being sold until September. The financing of this slow-moving finished stock was an undiminished drag on the company's health.



Mini-crushers capable of on-site recycling of more than 10 skips per day

Red Rhino had been operating with quite a limited sales team, comprising one individual with an administration background and a second whose experience was in office equipment sales. Bradley Everett's investment had been made on the prospect of changing the sales model to one which was to operate through dealerships. These dealers, holding stock from which to sell, marked the introduction of an indirect sales model for Red Rhino. However the dealers found a real difficulty in making what was still, in effect, a "concept sale" – the building trade was principally familiar with large-scale concrete crushers, and the idea of introducing a small transportable machine was still too novel for many.

Introduction of management disciplines

With sales having stalled, costs growing and the new funding having rapidly vaporised, Crawley needed to see some action taken quickly and began the search for a direct sales manager. He saw this as the key to moving the business forward, on the basis that direct sales volumes might be lower but the gross margin would be significantly improved. However the company's accounting advisors pointed out that the priority was more fundamental. The company required the installation of management structures which could ensure that the skills which were most critical to success were secured. In addition the constant cash drain on the business, stemming in part from an unsustainable salary structure, needed to be addressed.

As a result Tony Maloney was appointed, nominally as Export Director, but in fact with a brief to restructure the business and to bring in much-needed working capital. A chairman, Peter Horwood, was appointed and a medium-term target was set of making the company ready for an AIM or OFEX listing, or for sale to other investors.

The new management immediately became acutely aware of the shortcomings of the business: sales were very low, costs were increasing, product failures were common and the accounts and business records were in a very poor state. Further funding was going to be needed in the short term, and the senior team approached the key shareholder to explain the situation. They forecast that the business required £300,000 additional capital in order to achieve some degree of stability. They believed that there was a good prospect of success: the building market was strong, and there was a rising demand for crusher capacity. This was due both to the growing impact of environmental and recycling issues, and to the potential cost savings which a relatively inexpensive crusher range could generate for a construction business.

Bradley Everett agreed to the funding, but required it to be in the form of a convertible loan and to dilute Crawley's interest from 51% to 22%. Towards the middle of 2006 Tony Maloney and Peter Horwood worked hard to get Crawley and Luckman to fully appreciate the issues. This business had progressed in the past on a flawed business plan and on unsupported sales forecasts. They believed that with some good progress the company could be made ready for a trade sale, and accordingly a radical new business plan was prepared.

By September 2006 the plan had been accepted. Crawley's role was to be changed to Technical & Development Director whilst Tony Maloney was to become Managing Director. In order to bring the business under control, costs had to be contained whilst the company took maximum advantage of all sales opportunities.

Maloney made a rapid assessment of Red Rhino's principle features. The company's range of mobile crushers offered customers in the construction business an attractive solution to their recycling needs. The product range comprised three sizes of machine, with processing rates ranging from 10 to 40 tonnes per hour.

Pricing for each model depended on the detailed specification that the customer required, and ranged from £22,000 for the smallest machine up to £79,000 for a high capacity model. Maloney could forecast sales of £3m in the coming year as the trade increasingly grasped the savings available to it from on-site materials recycling.

As Maloney started to plan the detail of the rescue in early 2007, he noted down his summary of the key elements of the company's situation.

Processes & Facilities

Very few processes in place.
No procurement, sales or invoicing systems.
Sales terms and conditions not documented.
Loose equipment warranty.

Manufacturing facilities, principally focusing on the assembly of bought -in components, in a relatively good state.

Knowledge & intellectual property

Effective and well tested designs.
Few procedures for issue control.
Some designs poorly completed.
All designs poorly protected; little opportunity for intellectual property protection.
Reliance on one individual for design work, near the limit of his capabilities.
Some scope for copyrighting existed.

Red Rhino design value largely based upon a good knowledge of power-source and power-function appropriate to the equipment. Centres on the use of hydraulic power which serves the product and the application very well: good with regard to safety; easy to adjust on-site; highly flexible.



Customer Base & Market Position

No historic sales strategy.
"Sell to anyone, anywhere."
Readiness in the past to give away a distributorship for a single sale.

Potentially useful USP centred around transportable, affordable crushers offering cost saving and environmental benefits.

The Entrepreneurial Team

Limited base of experience.
Business-sense located in a few individuals.
Over-ready in the past to take cash from the business prematurely.

Design and development skills and an "ideas orientation" formed the basis of the company. Business disciplines far too late in being introduced.

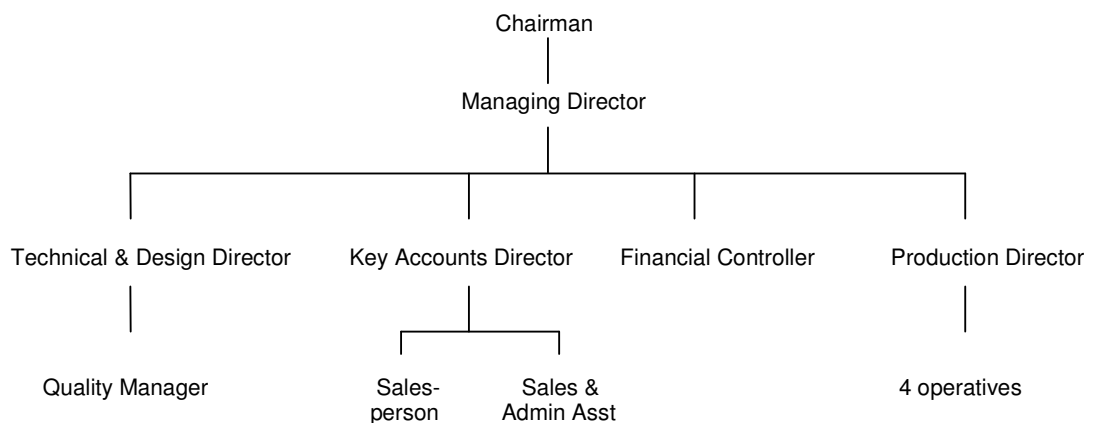
Cash Flow & Profit

Company constantly on the back foot with regard to working capital.
Cash management historically addressed only once in crisis.
Cash taken out of the business prematurely in the form of unsustainable senior salaries.

Margins potentially adequate and, with careful management in a favourable recycling and cost conscious environment, some potential for the long-term ability to generate cash in the business.

Maloney faced a considerable challenge. From his assessment, Red Rhino had the potential to hold position as the leader in mobile recycling equipment in the UK and more widely. But it was clear that some serious action was demanded if the long-term future of the Red Rhino business was to be secured.

Organisation – 2007



NOTES FOR TUTORS

Questions to consider

1. On your assessment, what two priorities should Maloney tackle first?
 - Priorities from amongst:
 - Installing financial systems
 - Controlling cost base
 - Working capital management
 - Operational disciplines
 - Grow customer base

2. What options for action would you propose to address these; why?
 - Outsource book-keeping and finance
 - Rationalise salary structure
 - Secure further funding
 - Install operating systems and procedures
 - Develop a sales promotion strategy

3. What feature of its history has been most damaging to the business? At what point and how might this have best been addressed?
 - Crawley's attitude to hand-to-mouth financing of the business
 - Little business planning
 - No basis of sound sales forecasting, leading to a perpetually fragile business

4. What lessons can be drawn from this case regarding the development of an entrepreneurial business?
 - The importance of:
 - Establishing a good spread of customers
 - Capitalising on barriers to entry
 - Controlling and channelling the influence of an 'ideas-based' founder
 - Embedding management competences into the team at an early stage
 - Installing business disciplines from the start
 - Obsessive attention to cash position

Update – 2008

Over 2007/08 the business continued to struggle, approaching a sales level which could support the business but only in a fragile way.

Financial systems and records were found to have been inadequate, to the extent that substantial amounts of VAT which could have been reclaimed were lost due to poor

management controls. A professional accounting function was secured on an outsourced basis and the financial control role became redundant.

In 2008 the company came close to insolvency and instituted a cost control drive to bring the financial position back under control. The directors took pay cuts of between 20% and 100%, and four roles were identified for redundancy – Quality Manager, Salesperson and two Operatives.

The business environment became tougher due to a depressed construction sector, but customer benefits – from the increasing green/recycling agenda and the cost benefits available from an on-site crushing capability – continued to offer the company a solid niche opportunity.