The story

Chinese business Four Dimensions Industry Company was set up by Yan Wang in 1996 to make security vehicles for transporting cash.

In China, most cash-in-transit vans had armed guards. But an increase in robberies exposed flaws with this model, as innocent people were often injured.

Dr Wang judged that he could be the first in China to create a higher standard of safety and quality with unarmed CIT vehicles.

The initial challenge and strategy

The complex technology for non-armed security vehicles did not exist in China and FDIC was not in a position to develop it quickly itself. So, it looked to find a partner in Europe where the market leader was the UK’s Johnson Security. Its customers included the big banks and the Royal Mail.

For FDIC, using Johnson’s technology would give it a base on which to develop this segment in China. For Johnson, it would provide an entry to the Asian market.

The companies set up FD-Johnson, a joint venture, in 1997. FDIC had a 75 per cent stake and Johnson took the remaining quarter.

In 1999, the company launched its first CIT vehicle in China. The business focused on professional security transit companies, for which safety and quality were the determining factors, and sales volumes soared until 2002.

The later challenge and strategy

Despite that early success, in 2003 Johnson Security fell into a downward spiral following the death of its founder.

The high-cost labour-intensive assembly process to produce bespoke vehicles for its European customers was also proving difficult to maintain. At the same time, the company was struggling to retain clients. The planned privatisation of Royal Mail, for example, was threatening their relationship.

Johnson faced a cash flow crisis and was on the brink of bankruptcy. This was a serious threat to FDIC. Johnson, with more than 70 patents worldwide, was the leader in CIT vehicles technology. If it collapsed or was acquired, the joint venture would lose its technological advantage.

So, Dr Wang bought Johnson himself and created Four Dimension-Johnson Industries Group.

One of his first steps was to make some structural changes in how the vehicles were produced. He assigned a large team of Chinese engineers the task of rationalising the design of the vehicle bodies, thus minimising the components needed to make a tailored product for European customers. Cabin panels are now made in
the Chinese factory for export to Europe for final assembly in the Johnson factory on locally sourced frames and transmissions.

In Europe, 4D-Johnson made sure to retain much of Johnson’s management and its design engineers. Their close relationships with the region’s customers enabled it to customise designs before sending the specifications to the Beijing office to be incorporated into components. This enabled the company to reduce the processing time for building a vehicle and partly offset the shipping time from China to Europe.

Between 2006 and 2009, the company’s sales more than doubled, from Rmb300m to Rmb650m, and the company diversified its product range and added services and upgrades. More than 20 per cent of the vehicle components are now produced in China.

**The lesson**

By pairing sub-assembly manufacturing in China with design and marketing in the UK, 4D-Johnson created a business model that combines China’s relatively low labour costs with the speed of execution and responsiveness of dealing with European markets. Managing the combined entity has been a challenge but both parties have learnt from each other.

As companies from China and other emerging markets develop innovative capacities and financial strength, European companies in mature industries may be forced to change their business models to benefit from the growth in emerging markets.

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