

TTP 'blunders' from consulting into product manufacture

INDUSTRIAL ENGINEERING

News analysis

The group matches scientific expertise to the needs of its global customers, writes **Peter Marsh**

Inside a large building just outside Cambridge, a team of engineers are building what amounts to giant vending machines for chemicals – refrigerated boxes each with room for 150,000 samples that are used in laboratory experiments.

The £200,000 machines are being made in the headquarters of TTP, an unusual consultancy business that conducts research and development in a range of disciplines for large companies around the world, which also has a sideline in making its own products.

The machines are normally sold to pharmaceutical companies or academic laboratories and rely on an eclectic range of technologies, including pneumatic control, chemicals know-how and mechanical engineering.

Gerald Avison, TTP's chairman and co-founder, says: "We find interesting problems for our scientists and engineers to tackle and then match our expertise to the requirements of companies around the world."

TTP was set up in 1987 and is owned mainly by 900 individuals, including its 300-strong staff, but with an 11 per cent stake held by Danaher, a US industrial company.

It is one of four technology consultancies in the Cambridge area, all of which operate in a similar way.

Mr Avison says that

TTP's sales and profits are holding up well, in spite of the recession. "A lot of companies want to keep spending on innovation since they think this will give them an edge on competitors when an upturn begins."

Mr Avison is projecting a 10 per cent increase in TTP's sales and pre-tax profits – which in the year to March 2009 came to £37.7m and £6.5m respectively – in the current financial year. Seventy per cent of the company's sales last year were from customers outside the UK, with roughly two-thirds coming from consultancy and the rest from products such as the "chemical vending machine".

Manufacturing products, which are then sold under the consultancy's own name, is relatively unusual for a technology consultancy. But Mr Avison says this is another way for TTP to make money from its inhouse expertise.

He adds: "It would be wrong for me to pretend we had a grand plan to make products. After starting up just doing consultancy this is something we blundered into."

The work done by TTP covers a range of industries including life sciences, food and consumer goods, telecommunications, electronic products and diagnostic instruments.

Its customers include Philips, the Dutch electronics group, Hewlett-Packard, the US information technology business, and the inks producer Sun Chemical of Japan.

"It's unusual to find a group of people who can combine expertise in such a range of technologies with the ability to link this to the market place," says Jeff Paslay, a scientist at Wyeth, a US pharmaceutical company.

A current development project at TTP concerns a

novel printing system being used in the beverage can industry.

The Tonejet system is flexible enough to be used for putting pictures and graphics on to just a few thousand cans, compared with the hundreds of thousands that are the normal batch sizes in the beverage business. The system can be set up to produce the images in a matter of days, compared with weeks for many rival pieces of equipment.

The system makes it cost effective for beverages groups such as Coca-Cola or Heineken to print images on to cans for special promotions, with their cans being used for small production runs before being re-programmed for a new set of containers.

Among the canmakers TTP has worked with on the project is Ball, the US packaging company.

Cambridge cluster that combines disciplines for companies worldwide

TTP is part of a little-known success story in the area around Cambridge, writes **Peter Marsh**.

The city is home to three other specialist technology consultancies, all of which share common ways of working that involve putting people to work in a range of technical disciplines and then making this knowledge available to companies globally.

According to Georges Haour, professor of innovation management at the IMD business school in Switzerland, the four Cambridge businesses are among a "small number" of technology consultancies around the world that work in this way.

"They [the consultancies] add up to an extended family of Cambridge businesses that pursue new ideas and have been successful," says Prof Haour.

The other three consultancies are PA Technology, Cambridge Consultants and Sagentia.

Between them the four employ more than 900 people in their Cambridge offices and laboratories, plus another 250 elsewhere in the world.

The combined annual sales of the four companies in 2008-09 was about £140m, with about 70 per cent of this coming from customers outside the UK.

Gordon Edge – a former electronics engineer who has headed three of the four consultancies, and also had an indirect role in the fourth – says the economic impact of the four businesses goes well beyond their annual revenues.

"If we were to compute the value of sales of products and services sold by companies around the world and which have been devised at least partly by the four Cambridge consultancies, then the amount runs to billions of pounds a year," Mr Edge says.

Mr Edge – who is now largely

retired and has no formal links with any of the Cambridge consultancies – says that central to the four consultancies has been "the highest academic standards plus the ability to think across different disciplines."

"The people working at these companies need to be able to apply new ideas in physics to a children's toy," Mr Edge says.

Among the products that the four Cambridge consultancies have helped to devise have been some of the world's first DIY pregnancy testing kits, created on behalf of Serono, the Swiss pharmaceutical group.

Other projects have included a new type of electric motor for Bosch, the German engineering company; a range of new vehicles for Fiat, the Italian automotive group; as well as a series of novel model trains for Hornby, the UK toymaker.