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Delivering Business Benefit through Knowledge Transfer Partnerships

Martin Wynn and Peter Jones

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Introduction

Marketing often seems to be associated with large organisations and concepts and case studies drawn from such organisations tend to dominate the majority of the standard marketing textbooks and the main body of marketing knowledge and know how. While Carson's (1990) work in Belfast found that many small businesses saw marketing as peripheral to their requirements, Carter and Jones-Evans (2000) argue that there is plenty of evidence that marketing is crucial to the survival and growth of small firms because *it represents (i) a vital interface between a small firm and a fast changing external environment, and (ii) a key internal management skill which differentiates between surviving and failing firms*. Hogarth-Scott, Watson and Wilson (1996) argue there is evidence that small business failure can result from poor marketing practices and/or from a lack of marketing expertise, and while they recognise that not all small businesses want to grow, they stress that all businesses do need to adapt to changing environments and changing customer needs.

This paper offers four small case studies, which illustrate how Knowledge Transfer Partnerships developed by the University of Gloucestershire Business School in association with the University Development Centre are helping small companies to adapt to changing environments and meet changing customer needs.

The Knowledge Transfer Partnership Scheme

The Knowledge Transfer Partnership (KTP) scheme has often been popularly and informally described as 'the best kept secret in higher education', and yet it is now delivering major business benefits for companies working with local Universities across the UK. The scheme, which has been running in one guise or another for over 25 years, brings government funding to enable organisations to take advantage of the wide range of expertise available within Universities. Essentially KTPs can be viewed as a four-way partnership between University, the company, the graduate (or 'Associate' as they are termed), and the DTI, who provide up to 60% of the funding for the project (Figure 1). The general aims of KTP's are to

- Improve the competitiveness of the company
- Enhance the business relevance knowledge and understanding within the University
- Enhance the career prospects of the KTP Associate

The partnerships involve the Associate working in an organisation from a minimum of one year to a maximum of 3 years. During this period an academic from the University is assigned for 25 days per annum to support and supervise the project, and bring in specialist knowledge and expertise as appropriate to ensure project delivery. Training and equipment are provided, and companies pay 40% to 60% of the project costs, depending on company size. The total value of the scheme is £40K per annum or £80k over the two years, which

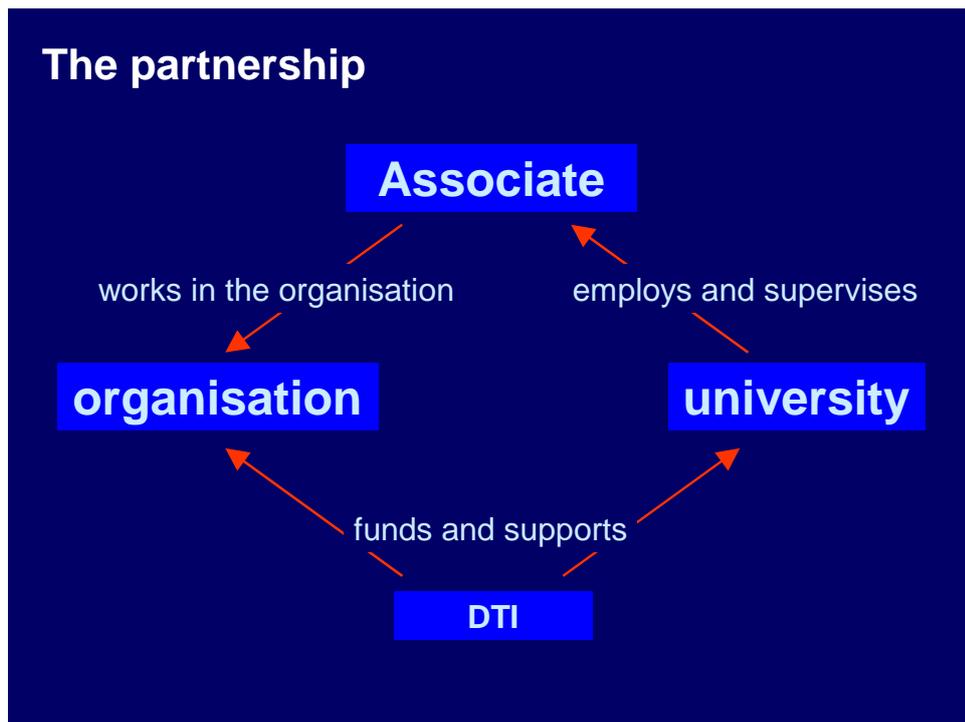


Figure 1. The four-way partnership that underpins KTP projects

has traditionally been the usual length of projects. A number of potential benefits are associated with KTPs. The benefits to participating organisations include

- Helping to unlock potential by identifying key areas of potential development and growth
- Providing dedicated additional resources to enable organisations to achieve development and growth goals
- Providing organisations with opportunities to access new technological developments in specialist fields and to exploit contemporary concepts and thinking in business

At the same time there Universities can derive a number of collective and individual benefits from participation in KTPs including

- Providing academic staff with opportunities to work on live business challenges which allow them to maintain an up to date knowledge of business thinking and methods
- Providing teaching materials to support both undergraduate and post graduate teaching through live case studies, design exercises and work placement opportunities
- Providing graduates with opportunities to register for higher degrees and to produce research papers for publication.

University of Gloucestershire

The University of Gloucestershire Business School is a major centre of expertise in Business Management and Information Technology in the South West of England and is home to over 90 staff and 2,800 students, 600 of which are on postgraduate programmes. Based at the Park campus in Cheltenham, with a wide range of courses in Accountancy, business Management, computing, IT, Marketing, Multimedia, International business, Law, Languages and Human Resource Management and a good track record in research, the Business School has spearheaded the development of knowledge transfer activities with local businesses over the past two years. Central to this success has been the approval of sixteen KTP projects during this period. The University Development Centre is the gateway to the University for businesses, employers and other organisations. The Centre was established in 2002 as a university wide resource for the support of Knowledge Transfer Activity including sponsorship and fundraising. It provides a professional interface with industry, commerce, the social economy and regional partners and it supports the University's Schools and Departments in commercialising and marketing the University's knowledge and skills and provides business support and skills training for University based entrepreneurs.

Brecon Pharmaceuticals

Brecon Pharmaceuticals Ltd (BPL) provides a range of 'outsourced' services to the pharmaceutical and healthcare industries, principally the packaging of manufactured drugs and of new drugs undergoing clinical trials. In both these instances, the drugs have to undergo a range of laboratory tests. Until 2003, BPL had, itself, contracted out this part of their service to third parties. A recent initiative, involving a KTP Associate working for the University of Gloucestershire, has been to add the laboratory testing service to BPL's direct in-house service offering. This project, which has been underway for circa 12 months, has generated additional income as a one-off service, competing with the laboratory contract companies BPL had previously used itself. This new revenue stream is currently generating an additional £50K per annum; the expectation is that this will exceed £200K in 2005.

Clients are predicted to prefer placing both their packaging and analytical needs with one company and may therefore consider bringing projects to BPL that would otherwise have gone elsewhere. BPL is expected to grow its turnover from £10.2m in 2004 to £22m in 2007. The new laboratory is a key strategic service to support and promote the increase in turnover and profit. There is a clear link between this entrepreneurial initiative and the planned growth of the company. The saving on laboratory costs and the growth in new analytical sales revenue are more or less in line with the overall growth in turnover of the company as a whole. The overall business strategy for the growth of the company has been a strong background influence that will help drive the growth in analytical laboratory services.

The project had five clear objectives:

- Establish a state of the art analytical laboratory to undertake routine analysis and associated testing for BPL's current & potential client base. *This is now in place.*
- Review and research client requirements for analytical services. *This is on going, but significant progress has been made.*
- Develop a centre of excellence for laboratory information, statistical analysis and analytical testing. *BPL's reputation in this field is growing.*
- Install new laboratory information systems and interface them with BPL's new corporate system. *Mainstream software packages are currently being evaluated for implementation in 2005.*

- Develop a new revenue stream from additional analytical work, rising to over £500k per annum by 2008. *A steady external revenue stream has been established.*

In addition, many aspects of the current day-to-day operations have been affected by the project:

- Improved turn-around time for all analysis
- Ability to promote new laboratory facility/expertise and further develop client relationships
- Improved investigations into quality related issues by use of analytical expertise
- Improved the general profile of BPL in the market place

BPL's Head of Laboratory Services, Dr Karl Fry, has overseen the growth of the laboratory function in the past year. He notes that 'Brecon Pharmaceuticals are now on track to achieve £10million turnover this year and the development of the laboratory service is a significant achievement that will help drive new revenues in future years. The KTP project has been at the heart of this corporate initiative, and we look forward to further progress in gaining additional laboratory contracts with both existing and new customers'.

Beacons Business Interiors

Beacons Business Interiors (BBI) was established in 1989 as an interiors construction company in Brecon in the heart of Wales. By 2003, the company had grown its turnover to £7.7m by focusing on providing blue chip clients with facilities support services, incorporating office furniture installation and design, Mechanical & Electrical design and construction services.

The facilities support market can be divided into different segments ('blue chip', the SME market and servicing market). In total the market is valued at £1billion. BBI is in a dominant regional position within the Principality, with only a small number of competitors. These are similar sized organisations, offering similar services, but without the same level of internal resource. However, nationally the competition is more comprehensive (especially in London) in what is a highly fragmented market place.

BBI had implemented some new core information systems (Sage, Goldmine CRM) in recent years, but the potential bottom-line benefits of this investment was not being fully realised. BBI needed to rationalise its business processes and improve communication and information availability to exploit the potential of its mainstream systems to drive company growth to an estimated £10m turnover in 2004/5 and £15m by 2008/9.

A two-stage strategy was adopted, again using a KTP Associate from the University of Gloucestershire – this time as IT/IS project manager. Stage one was to provide a quick profiling of BBI's information systems and then effect a series of quick wins to introduce new connectivity between the different software packages. Stage two is to take a longer-term view of the systems required for the company to support its growth over the next five to ten years. The interesting thing is that the 'quick wins' have themselves proved effective enough to support a significant growth in sales turnover, culminating in the winning of a £1.75 million contract with the Office for National Statistics in November 2004.

Some of the key benefits have come from the development of an integrated project-costing sheet, which eliminates the re-keying of data, and provides an on-line snapshot of project profitability. This gives the estimation department a quick effective feedback tool to guide their pricing and eliminates painstaking manual work in working out contract detail. A

further enhancement has been the introduction of automated programmes to produce on-line reports for all purchase orders and sales orders related to a specific project. This is of particular value to a company that is adding value through design, acquisition, assembly and sale, and is something that neither the Sage Accounting nor Goldmine customer database systems could easily provide. Hitherto, BBI's procurement department would record purchase orders and sales orders for a specific project in the customer database and then track details from Sage as a separate operation. The automated program, written and implemented by the KTP Associate, links the two systems and provides one automated project report. Another program provides detailed sales analysis by project and customer, again pooling data from non-integrated systems to provide improved management information.

Many aspects of day-to-day operations have been affected by the above developments. The ability of BBI to respond to customers' information and collaboration requirements has numerous benefits in maintaining existing relationships and securing new business. The introduction of comprehensive integrated systems solutions, which share a common database, is helping to minimise data duplication and data errors. This has reduced the overhead on management in resolving data conflicts and generally improved information quality and speed effective decision-making.

Another benefit to BBI will be to allow flexible working from home. BBI have just 45 staff and many of them are away from the office for much of the working day. In the past, effective access to key information from remote PC's and laptops has been impractical, because of lack of integration. This has frustrated attempts to encourage remote working by sales, engineers, and other staff. The new integrated systems platform will make this possible. Simon Oldroyd, BBI's Commercial Director, comments 'Already we are seeing significant improvements in information availability that are supporting our drive to increase turnover and bottom-line profitability. The KTP project is central to the delivery of our five year business plan.'

Pegasus Retirement Homes

Pegasus Retirement Homes Limited develops private apartments for sale to the active retired throughout the UK from a central base in Cheltenham. As part of their expansion programme in 2003, they wished to retain a central office in Cheltenham and use staff working from home to manage their expanding regional operations. This required a significant improvement in their communication systems and project monitoring capabilities. If their business processes were not streamlined with the help of new technologies, their expansion plans would inevitably have been hampered. In addition, Pegasus required slicker customer service that required a new outsourcing arrangement with a new fulfilment house.

There are currently nearly 5 million owner-occupier households of retirement age in the UK. In contrast, there are only 500,000 properties geared for living in retirement – otherwise termed 'sheltered accommodation'. Of these 500,000 properties, only 70,000 have been built by private sector companies, and these companies are currently building circa 2,500 new units per annum. There is thus enormous scope for the private sector to help meet the shortfall in sheltered accommodation in future years.

In the private sector, the market leader currently provides about 75% of the 2,500 new units constructed each year. The remaining 25% is provided by a number of companies, and Pegasus is now one of the biggest of these. Pegasus sold 44 properties in

2001 and 84 in 2002, 98 in 2003 and 140 in 2004. Pegasus target sales figure for 2008 is 700. The aspiration is to increase market share to 10% in 2005 and 20% in 2008. Such rapid expansion would traditionally involve setting up new branch offices and decentralisation through geographical distribution, with loss of control and spiralling costs being serious threats in a period of rapid growth. The company wanted to address this issue and expand its business without exposing themselves to these threats. At the same time, an opportunity to embrace the new technologies offered additional incentives to streamline the existing operations.

Again, the University of Gloucestershire has been involved in this change process, providing a KTP Associate to act as Systems Development Manager for two years (from Jan 2003 till January 2005). The overall objective was "to develop and implement new management processes and support systems that will allow the planned expansion of Pegasus in volume and geographic spread". During this period company turnover has grown from £10.4m in 2002 to £31.7 million in 2004. This has been achieved with just 39 employees.

The key areas of business benefit delivered by this two-year project are:

- Introduction of a new Customer Relationship Management System (CRM) and new outsourced fulfilment house
- Improvement in the use of existing IT via training and best practice
- Extension of the use of IT to the sales offices at each apartment development site
- Reduction in the cost of connectivity by introducing Virtual Private Network (VPN) and Wireless technology

The CRM implementation has been a 12-month sub-project and represents a step change in Pegasus' ability to analyse marketing and sales data and hence increase sales. The new software will be used at Pegasus main office in Cheltenham and at each sales office. The Pegasus network now employs VPN and wireless technology, part of a total new investment of some £250,000 in technology and software development. As a result Pegasus are likely to use less staff as an expanding sales team is managed by the same number of managers and administration staff. A realistic estimate of savings is circa £150,000 per year. The completed project will increase the rate of sale through enhanced CRM capability and improved communication to staff and customers. Fifty percent of Pegasus employees are based away from the office and the company depends on effective communication with staff and its business partners as a core business process.

The retirement housing market is set to expand from 9.4 million in 2001 to 12 million by 2011 and to 15 million by 2040. There is an enormous opportunity for Pegasus Retirement Homes to participate in this growth if it has the systems, processes and funding in place. Steve Hughes, Director of Business Systems at Pegasus, notes that 'as a result of the new CRM system, it is reasonable to expect an increase in the rate of sale equal to approximately one unit per site per annum. For ten sites, this would yield an extra £800,000 gross profit per annum. As the number of developments for sale increases, then this figure will increase accordingly. KTP has helped us to focus project resource and expertise on making this happen.'

Applied Energy Products Ltd

Applied Energy Products Ltd (AEPL) is a manufacturer of space heating, water heating and ventilation products sold under the brands of Creda, Redring and Xpelair. The company, which is based in Peterborough, had a turnover of under £50m in 2003/4 and

employs 240 staff. The main route to market has traditionally been through electrical wholesalers. There are few formal supply contracts in this sector with most products sold on demand.

The social housing market consists of 2.5m properties in England alone, of which 300,000 are refurbished each year. Assuming expenditure of £1,500 per property, there is an annualised market of £450m. AEPL saw a major business opportunity in dealing directly with the major specifiers such as local authorities and housing associations. In addition, there was potential for direct marketing of AEPL's products to the end-consumer via various channels (e.g. web-based promotion, direct mailing). The exploitation of this business opportunity required AEPL to change its business model from a product based company to one that offers integrated, customised solutions, covering water and space heating and ventilation in domestic dwellings, both in the 'social' and private sector. They are now securing supply contracts of at least one-year duration by offering bespoke solutions to customer problems and new products and services, which add value to AEPL's customer offering.

AEPL marketed its range of products using sales representatives who network with UK distributors of electrical equipment to maintain brand awareness and loyalty. In this approach, no formal contracts exist between AEPL and its distributors who purchase goods on price/reliability/availability as and when necessary. However, AEPL has the engineering capabilities to develop new products and integrated solutions in the private and social housing market areas. The main challenge has been to exploit this capability by developing new routes to market, which, in turn, is requiring the company to transition from a supplier of products to a supplier of services and solutions.

Key to the successful implementation of this plan is the shift from an indirect, product led, intermediated marketing strategy to a direct, serviced orientated approach. AEPL recognised it did not have the skills and resources to make this strategic change alone and appointed a KTP Associate from the University of Gloucester to develop and implement a service based marketing strategy to enter new markets: This has involved:

- Reviewing the current approach to marketing
- Developing a marketing strategy based on customer needs
- Implementing, monitoring and refining this marketing programme
- Developing the strategy for on-going expansion of products/services

The project is now in its second year and delivering additional revenues of circa £1m in 2004/5, which is estimated to rise to an additional revenue stream of £2m in 2005/6. Significant profit increases are being achieved by increasing sales turnover in the social and private housing sectors.

The implementation of a service led marketing strategy is bringing about a culture shift in company departments that will enable the company to compete effectively in the new market sectors. This will directly affect the business model and ways of working across the company operation. Existing sales staff are expanding their knowledge of the housing sector and are better placed to secure and deliver supply contracts to assist these customers to manage or sell their housing stock more cost effectively. The appointment of the KTP Associate as Social Housing Manager in early 2004 has acted as a catalyst for the exploitation of further marketing opportunities in the housing sector and the extension of operations into new areas.

The change in culture initiated through the programme will be extended to allow the business to expand its operations cost-effectively. It is intended that manufacturing and other departments will incorporate changes in working practices to give the flexibility, quality and delivery performance required to penetrate new market opportunities cost effectively.

Existing staff will be trained in these techniques so that, as far as possible, productivity will be increased in preference to the acquisition of new operatives. The continued association with the University of Gloucestershire will help to enable this process of change.

Nigel Stanford, AEPL's Sales and Marketing Director summarised the project as 'a key instigator of our drive to provide customer specific products and services and align our culture and organisation behind this new initiative'.

Conclusion

The KTP project initiatives outlined above illustrate some key issues around the development of improved customer service. All four companies are expanding rapidly and optimising the customer marketing cycle of attract-engage-retain-learn-relate is key to the

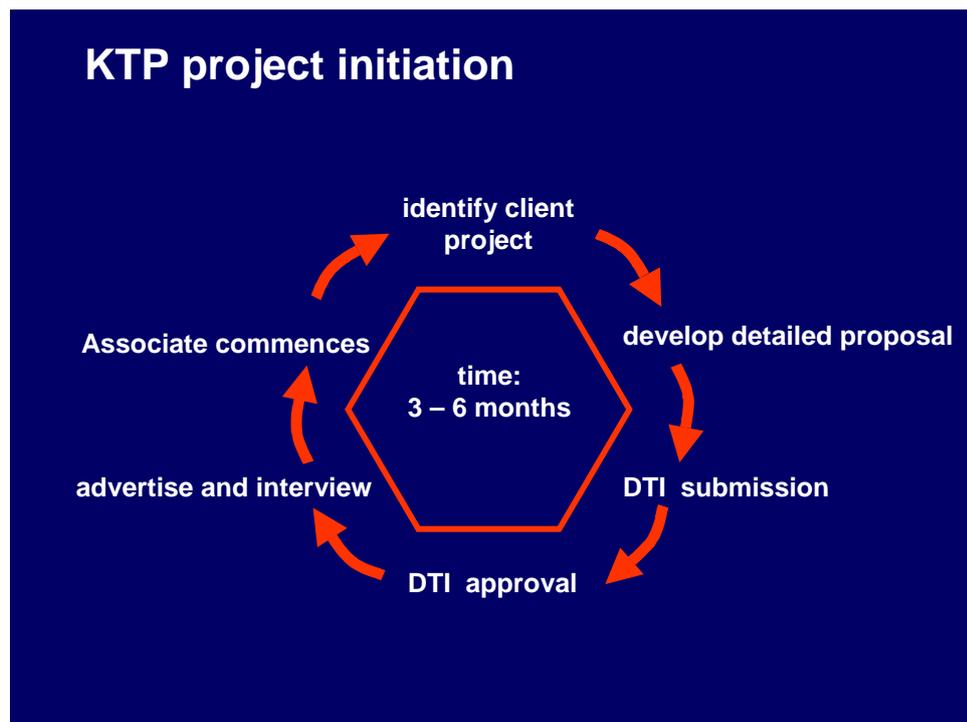


Figure 2. Getting a KTP Associate 'on board'

future success of all three. Kalakota and Robinson have asserted that effective customer relationship management requires an 'integrated sales, marketing and service strategy that depends on co-ordinated enterprise-wide actions', and Davydov notes, 'the challenge is to integrate the whole set of enterprise wide applications into a single integrated information network'. These case studies show that to do this effectively requires a combination of the right **processes**, supported by **integrated systems and technologies**, which can deliver and communicate appropriate **information** to guide and inform the making of key decisions.

The great value of the KTP scheme is that it provides a dedicated resource to instigate, promote and manage key initiatives to drive the business forward. It brings in new perspectives and expertise from the University, and the DTI provide a clear steering group process that encourages strict disciplines to ensure project delivery. Indeed the DTI estimate each KTP project will, on average, add £130K per annum to company profit. It does, however, take some time to get an Associate 'on board' (typically 3-6 months – see figure 2), but experience to date suggests the time is well invested and that these projects more than pay their way for the companies involved.

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