Creating and sustaining Knowledge Transfer in a post-92 University

Introduction

SMEs play a critical role in the economy, accounting for 59.4 per cent of private sector employment and 50.1 per cent of private sector turnover in the UK. With 25 million SMEs in Europe and 4.8 million in the UK, engaging SMEs in innovation and collaborative research is essential for economic growth and prosperity.

Knowledge Transfer can be defined as "*the application of the knowledge of a university or non-university research centre into a business or community organisation, leading to innovation that improves its ability to operate in terms of improved profit or efficiency*" [1]. Knowledge Transfer Partnerships (KTPs), the UK government's flagship knowledge transfer initiative, apply this approach and with nearly 40 years of successful operation have gained the reputation of delivering high quality knowledge transfer and innovation into businesses and organisations.

KTP case studies and statistics [2] identify that there are concentrations of KTP activity, by sector, region and institution. However, there is very little information available on how such successes have been developed and maintained. Nor does the literature offer many suggestions as to how to initiate KTPs in a systematic way with serendipitous networking or existing SME contacts the most commonly identified way of generating KTPs.

The approach to be presented was developed as part of the ████████████ ████████ project [3], where the University had a key role in knowledge transfer, ensuring that the knowledge and competence of the University is available and accessible for regional SMEs. However, when this project began in 2009, the University department that held the grant had not had an active KTP since January 2007 and the University held no current KTPs.

An alternative approach to KTP development

With the goal of increasing the number of KTPs at the University, in parallel to taking a proactive approach to externally engaging with SMEs, with a number of events and targeted marketing campaigns, we also focused on internal requirements from the academics. Using practitioner approaches from user experience, we analysed stakeholder and user requirements and expectations of the KTP application process. Our key issue was to identify what it was that was inhibiting academics from engaging with KTPs and if possible, remove it. The key factors that emerged were that the KTP application process and system needed to:

- Provide the initial connection, "*the lead,*" but to screen the project and SME, and to be sure that the KTP is very likely before engaging academics
- Be as streamlined and as fast as possible for the academics (the SME and the KTP Advisor).
- Reduce as far as possible the entering of data/text into the form by the academics
- Remove all the background bureaucracy for the participating academics and make sure potential applicants know this

- Prove it can be done, make it enjoyable and tell academics about it at well-publicised internal events

The critical element in our approach was that the KTP development team included academics who are experienced bid writers who have been involved in collaborative research. As KTP champions, these academics do more than promoting and supporting, for us the commitment has been to write the bids in collaboration with our business development colleagues as a service rather than as a participating academic. The following figure outlines our approach:
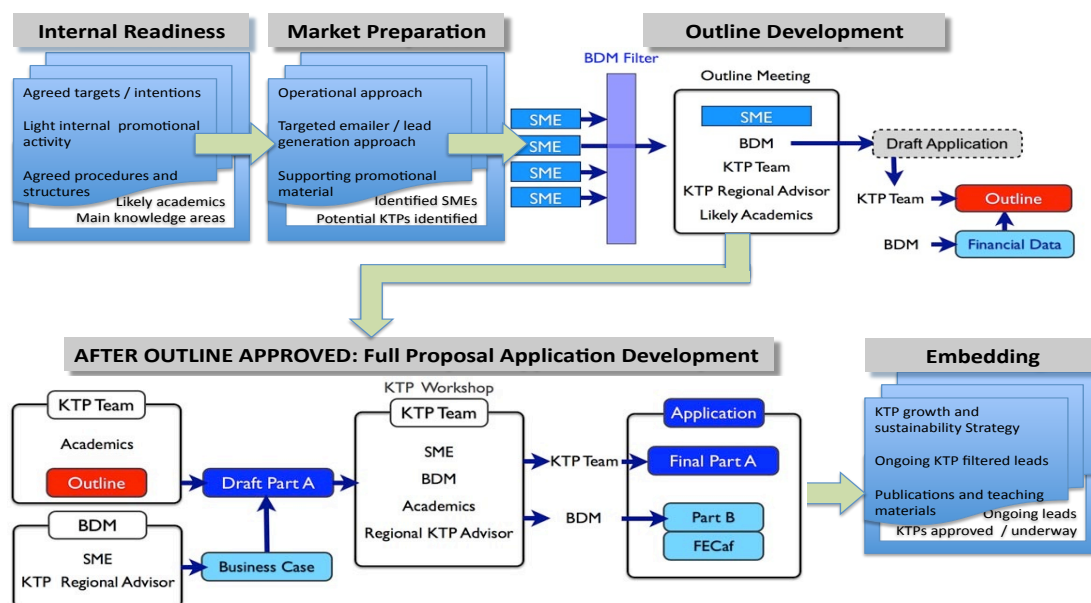
Through incorporating KTP champions and business development staff, the team can readily screen KTP opportunities, only engaging participating academics when a KTP opportunity seems certain. Through incorporating KTP services and support staff, the business specific aspects of the KTP can be achieved without engaging the participating academics. Engaging with the SME and academics in workshop mode, enables most of their information to be obtained within half a day. Enmeshing the KTP approach within the University systems and providing the requirements for those systems reduces administrative burden on both the participating academics and their managers. With subsets of the same team working across all of the KTP applications, the process has improved as learning and knowledge of KTPs increases. We also vigorously marketed KTPs and our approach to academic staff as well as to SMEs, so that academics were aware and interested, and also that they knew that their input at this stage (pre-award) would be relatively little.

Results and Impacts

From no externally funded software sector knowledge transfer projects in August 2009, by late 2010 ▮▮▮▮▮▮▮▮ had the fastest rising trajectory for KTPs, with 6 classic 2-year Knowledge Transfer Partnerships (KTP) and a 40-week KTP. These have involved 18 academics, both from Computing and inter/cross faculty collaborations. Amongst the completed KTPs, we have consistently received Very Good and Outstanding rankings, with the participating academics

positive about their projects. This suggests that light touch involvement and efficient information gathering from academics pre-award provides an appropriate approach.

Discussion

KTPs provide clear measurable impact on national, regional, university and project outputs and targets. They offer potential for profile raising and promotional material. With the bi-directional nature of knowledge exchange, KTPs also have a significant impact on pedagogy, with teaching materials, case studies, projects and context-based commercial exposure significantly enhancing the student experience. Unlike many funding streams, KTPs are immediately accessible to most Universities and academics. They do not require facilities, significant publications or extensive track records. They are for academics with current, relevant, timely knowledge and competence who can collaborate in a real-world problem, which is just about everyone. Further, KTPs may well provide the essential foundation for establishing relationships with SMEs to enable access to an increasing number of EU and UK funders.

Our results, experience and knowledge indicate that collaboration between academic KTP champions and service staff is key. Rather than newly creating a KTP team each time an opportunity arises, the KTP team with academic and business skills remains constant, extended by the relevant academics and SME at specific points in the development process. This approach provides an efficient, enjoyable streamlined process, considered to be exemplary by KTP Advisors. Our approach has resulted in significant benefits to the University, region and SMEs, and has greatly increased academic engagement in KTPs at our University.

References

[1]   Howlett, R. J., Knowledge Transfer between UK Universities and Business, in R.J Howlett (Ed), Innovation through Knowledge Transfer: Smart Innovation, Systems and Technologies, Volume 5, Part1, Springer: Berlin, 2010, pp1-14

[2]   KTP information and reports available at: http://www.ktponline.org.uk/

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