

Embedding knowledge and affecting positive change within industry by utilising the skills held within Higher Education Institutions and how you may get more than you bargained for.

Abstract

Many schemes already exist to exchange and embed the knowledge held within Higher Education Institutions (HEI's) into industry in order to help promote growth and provide world leading expertise and practices. One of the longest established schemes available is the Knowledge Transfer Partnership Scheme (KTP) which is currently facilitated by the Technology Strategy Board (TSB). The KTP scheme places a high calibre graduate (referred to as KTP Associate) within an organisation for a fixed term contract working towards achieving a number of pre-determined strategic organisational goals. This scheme facilitates the transfer of knowledge and skills through a rigid structure of regular review meetings, between all stakeholders and the encouragement of a less formal relationship between Senior Academics at the HEI and Senior Staff within the organisation.

The delivery process of the KTP Scheme has been refined throughout the schemes life span to optimise it towards achieving the organisational goals set out at the conception of the project. These goals are established and refined by the company and the HEI before any interviews for the graduate take place. If the project is deemed within the scope of the TSB then the process of recruiting a suitable graduate is undertaken. The benefits of this type of scheme have been proven over many years and across a wide breadth of projects and industrial organisations, statistics show:

- An increase of over £220,000 in annual profits before tax
- The creation of three genuine new jobs
- An increase in skills of existing staff

<http://www.ktponline.org.uk/what-can-ktp-offer-your-company>

However placing such graduates within dynamic organisations who wish to affect change often leads to additional benefits to the organisation; which had either not been considered when establishing the organisational objectives, or were not conceivable at the time of the projects conception as they have been built on work established throughout the project. It is this 'added value' within the scheme which can be extremely beneficial to organisations effectively they are gaining more from the scheme than envisaged. In addition to a critical appraisal of the KTP scheme this added value

will be investigated through a paper documenting a specific KTP partnership. Reviewing the initial outlined objectives of the partnership, how the KTP scheme facilitated the delivery of these organisational objectives leading to a comparison between the initial partnership goals and actual benefits received by the organisation.

This partnership is between De Montfort University (DMU), Leicester and Nusing Manufacturing (UK) Ltd (NMUK), Loughborough, the associate in this partnership is Nicholas Rowan. NMUK are a manufacturer of Acoustic Movable Partition Walls (AMPW's), an example of these products can be seen in Figure 1, and the objectives of this KTP partnership were:

1. To establish a development department and design potential within NMUK
2. To help with the selection and implementation of a 3D parametric modelling Computer Aided Design (CAD) system.
3. Aid in the design of a Semi-Automatic partitioning system
4. Aid in the design of a Fully-Automatic partitioning system



Figure 1 An example of an installed AMPW

A review was undertaken into the effectiveness of the methodology of knowledge transfer within the KTP scheme to establish how effectively it delivered the organisational goals. Whilst the rigid review structure, Local Management Committee (LMC) meetings provided an excellent opportunity to track the overall progress of the project, the extended time periods between these meetings can lead to large amounts of work being completed without review. To this end the informal meeting structure established between the Associate, the Lead Academic and the Company Supervisor satisfies this need, however, the less formal structure can lead to meeting times being altered due to other commitments. This is an extremely strong and effective structure to deliver organisational goals and change.

The outlined organisational goals and their inherent limitations were also investigated. The limitations, especially in the delivery of products, objectives 3 and 4, were defining a specific completion point where all stakeholders were satisfied that the objectives had been met. With the development and launch of products, there are many points where it can be said the design is complete. To this end it was recommended that documents were drawn up and agreed upon, where a definable criteria was established for the successful completion of these products in the eyes of the stakeholders.

An investigation was undertaken into what 'added value' this project brought to NMUK and how it could be quantified. Three key instances were defined and discussed:

1. Production of quantifiable test data and a published paper to support the launch of another innovative, alternative product which utilised an adhesive based composite structure. This testing allowed for the safe delivery of this project with the knowledge that this composite structure was sufficient to support the weight of the partitions. Without the partnership this data could not have been produced.
2. Working with staff to achieve higher academic qualifications to benefit the organisation. During the project the associate utilised their Personal Development budget to gain specific acoustic qualifications, along with members of staff at NMUK. This will benefit the company and set them aside from their competitors.
3. The project has enabled the simplification and delivery of complex acoustical theory to educate staff in the wider organisation as to how and why products perform, allowing the group to differentiate themselves from other organisations.

These activities are quantified and compared with the initial project goals to determine the scale of the additional benefits gained by the organisation. It is deemed that the gaining and delivery of specific acoustical knowledge has allowed NMUK and the wider group of companies it operates within to set themselves apart from other competitors within their market place.

It is concluded that it is highly likely that all of the organisational objectives will be met before the end of this partnership, with effective knowledge transfer having already been implemented so that the additional skills / knowledge are retained within the organisation after completion of the partnership. The scale of the added value in this project is outlined and discussed and the case presented that the KTP scheme directly encourages the activities leading to this being achieved. The impact of this added value is also presented within the wider context of the group of organisations NMUK operates within.