



Consulting the Experts

The University of Edinburgh has found Knowledge Transfer Partnerships (KTPs) to be an excellent model for enabling companies to consult the experts in a collaborative partnership with a University for strategic growth projects.

PARTNERSHIP WITH LEADING BUSINESS ANGEL SYNDICATE

The University of Edinburgh Management School has joined with Archangel Informal Investments Ltd in a £154,000 Knowledge Transfer Partnership (KTP) to improve private equity investments into new technologies.

The partnership is one of three special KTPs supported by the UK's Department of Trade and Industry to stimulate private equity investment into new technologies and to help train a new generation of managers of venture capital and angel investment in the UK. This is the first time that a KTP has been set up between a UK university and a business angel syndicate.

The two-year partnership will examine processes and management techniques in an angel investment context. This will aim to help improve investments into emerging Scottish-based technologies, in areas such as medical devices, bioscience, informatics, engineering and energy. A Research Associate will work as part of the executive team at Archangel, learning about US investment practices through the Kauffman Fellows Program. The Associate will be mentored by leading academics in the Management School and senior directors at Archangel.

John Waddell, Archangel's Chief Executive, said: "We have grown significantly since we came into existence in 1992 to become Scotland's leading business angel syndicate and continue to work to improve our operations. Archangel is very positive about the prospect of working with the University of Edinburgh Management School and with a highly skilled KTP Research Associate."

Dr Geoff Gregson, Edinburgh's lead academic on the project, added: "Archangel plays a critical investment role for early-stage technologies in Scotland. We share with Archangel a commitment to improve methods to ensure that the best of Scottish technologies gets to market and become profitable."

Visiting Professor Richard Harrison, one of the world's foremost authorities on venture capital research, believes that: "This project will provide the opportunity to research at first hand, for the first time, the internal operating and decision-making processes of a business angel syndicate. This includes the identification and screening of potential investments, assessment and management of risk (particularly technology-related risk), due diligence process and the post-investment relationship with portfolio companies."



Paul Anderson of the School of Informatics

XCITING DEVELOPMENTS IN 'ON DEMAND' WEB RESOURCING

The University of Edinburgh's School of Informatics has been awarded a Knowledge Transfer Partnership (KTP) grant for a two-year collaborative project with internet service provider XCalibre Communications Ltd.

The project aims to develop a network infrastructure that will enable XCalibre to offer scalable application service provisioning on demand. The growth strategy of XCalibre Communications centres on moving the focus from web-hosting to building an 'on demand' application service provision.

To achieve this, the company has recognised that it should significantly improve the management and utilisation of its hardware resources.

The University's Academic Supervisor on the project, Paul Anderson, was introduced to the KTP by colleague and support academic on the project, Stuart Anderson after the East of Scotland KTP Centre had directly approached Stuart. Both he and Paul were identified as having the expertise that matched the company's needs. Following meetings with the company directors, their needs were outlined and a project plan was devised from there.

Paul has no doubt about the challenge, but also sees the opportunity that such a relationship can

bring. He said, "The production computing environment at XCalibre makes demands in terms of complexity, performance and reliability that are beyond what is normally available for my work. For me, the initial attraction of the KTP was the opportunity to validate my ideas on 'system configuration' under these challenging conditions."

He continued, "Working with the company has been very stimulating and will lead to new ideas and further collaboration between Informatics and XCalibre. I have been impressed by the opportunities that that programme offers to the graduate and I think there are real benefits for all concerned."

UNIVERSITY SPIN-OUT DEVELOPMENT SOFTWARE MODEL FOR SUCCESS

DEM Solutions Ltd, a University of Edinburgh spin-out company, has returned to the University to further develop its EDEM™ software in a Knowledge Transfer Partnership (KTP) project with the University's School of Engineering & Electronics.

EDEM™ is an advanced DEM (Discrete Element Modelling) simulation and analysis tool that

predicts the flow of particulates in complex manufacturing processes. EDEM™ produces valuable information enabling engineers to investigate the effect of product characteristics and operating conditions without the need to build costly prototypes.

DEM Solutions has also developed the EDEM-CFD Coupling for FLUENT which is a unique tool that allows for the simulation of particle-fluid systems. EDEM is the world's first DEM software that can be coupled directly with CFD software in such a way to model solid-fluid phase systems at the particle scale. This capability allows customers to tackle simulations that would not previously have been possible, including dense phase pneumatic transport of particles, fluidized beds, slurry handling and separation processes.

Working with Dr Martin Crapper in the School of Engineering & Electronics, Dr Wai Sam Wong, KTP Associate, is reviewing the CAE tools market, examining existing discrete element modelling and computational fluid dynamics technology and exploring the range of fluid/particle applications to be accommodated in the improved EDEM-CFD Coupling for FLUENT.

"the relationship with the academic team at University of Edinburgh will stimulate further research opportunities in the future."

Dr John Favier, Chief Executive and founder of DEM Solutions, believes that "the relationship with the academic team at University of Edinburgh will stimulate further research opportunities in the future." He added, "This collaboration will result in a four fold increase in the sales of the stand-alone coupling module."

