

Knowledge Transfer Partnerships

KTP BENEFITS

Knowledge Transfer Partnerships are designed to benefit everyone involved

- 🔄 Businesses will acquire new knowledge and expertise
- 🔄 KTP Associates will gain business-based experience and personal and professional development opportunities
- 🔄 Universities, colleges or research organisations will bring their experience to enhance the business relevance of their research and teaching

Knowledge Transfer Partnerships

Accelerating business innovation; a Technology Strategy Board programme

<http://www.ktponline.org.uk>

NCR FINANCIAL SOLUTIONS GROUP LTD KTP OPENS WAY TO EXTENDED ATM SERVICES

ABOUT THIS CASE STUDY

This Knowledge Transfer Partnership (KTP) paired the NCR Labs with the School of Computing at Edinburgh Napier University. The collaboration aimed to prototype and evaluate new interactions between bank customers and Automatic Teller Machines (ATMs) that tailor transactions to the needs of each individual user.

ABOUT THE SPONSORS

The Economic and Social Research Council (ESRC) is the UK's leading research funding and training agency addressing economic and social concerns, providing high quality research to business, the public sector and government

The Technology Strategy Board is a business-led organisation established by the Government. Its mission is to accelerate research into, and development and exploitation of, technology and innovation for the benefit of UK business – building economic growth and quality of life.

FAST FACTS

- 🔄 Extended understanding of potential new Automatic Teller Machine (ATM) services
- 🔄 Evaluated prototype ATM offering personalised and extended services
- 🔄 Identified potential for sales growth through extended ATM services
- 🔄 Enhanced in-house expertise and consolidated reputation of the Dundee site as a centre of R&D excellence
- 🔄 The Academic Partner realised benefits across staff development, research and teaching
- 🔄 Valuable industrial experience for the Associate, and chance to develop his managerial and project management skills

The Company



“NCR is universally recognised as the global leader in self-service, grounded in continuous technology innovation and our commitment to understanding our customers’ and consumers’ needs. This successful KTP enabled NCR to drive further our consumer understanding.”

Graham Johnson, Director, Advanced Technology & Research, NCR Financial Solutions Group Ltd

NCR Corporation is a global technology company, leading how the world connects, interacts and transacts with business. NCR’s Dundee location is the global centre for research and development associated with the financial solutions industry.

ABOUT THE PROJECT

NCR has been the leading global supplier of ATMs for over 21 years. The Company wanted to grow its market share and improve profitability by helping banks to deliver differentiated services through its ATMs. This KTP was initiated to help NCR to prototype and evaluate new interactions between bank customers and ATMs, focusing particularly on services that tailor transactions to meet individual user needs.

Through this KTP, the Company has gained much new knowledge related to its expanding self-service business.

BENEFITS

The collaboration with Edinburgh Napier University has achieved all its aims and more, improving NCR's competitive position and confirming the Dundee site as a centre of excellence in innovation and advanced technology research. The innovative global research has provided the Company with much new knowledge related to its expanding self-service business, complementing and expanding the expertise within its R&D department.

Under the project, the largest detailed, online, trans-national survey on

consumer opinions of current and future ATM services was carried out. Responses revealed that consumers only wanted additional services that offered a clear benefit or delivered additional security. Data also provided a valuable insight into cultural and market differences across the world.

A prototype ATM was built incorporating novel personalised services to test consumer reaction. Results from the trial at Edinburgh Napier University backed up the survey findings, indicating that consumers, particularly younger ones, accepted

the use of personal information and were happy to utilise additional services, such as accessing news headlines or budgeting advice at a self-service kiosk.

RESULTS

- Increased understanding of ATM usage worldwide
- Identified potential for sales growth through extended ATM services
- Enhanced reputation of NCR's Dundee site as a centre of R&D excellence

The Associate

"This KTP project has provided me with benefits in almost every area, allowing me to apply the skills I have learnt and opening doors for me in both my personal development and my career."

Jamie Sands, KTP Associate

Jamie Sands applied knowledge from his degree in Psychology to develop appropriate surveys for this KTP project. His motivation, excellent communication skills and willingness to accommodate changes to the project objectives, helped to ensure that valuable data were collected and a worthwhile project was delivered.

BENEFITS

This challenging project provided Jamie with many opportunities to build and enhance his technical, personal and professional capabilities. He has developed excellent project management skills, overseeing the development of a detailed and complex survey from initial project investigation, through user testing and prototype development, to full implementation and analysis. Jamie also gained a valuable insight into the workings of a large organisation, and built career-essential skills through core KTP training modules.

RESULTS

- Significantly enhanced technical and project management skills
- Valuable experience of work in a large organisation
- Prepared papers on personalisation of ATM services
- Gained PhD and completed NVQ Level Four in Management

The Academic Partner

Edinburgh Napier
UNIVERSITY

"Edinburgh Napier is committed to help companies create usable and profitable products, and thus keeping knowledge jobs in Scotland. Engagement with major corporations like NCR is also invaluable in shaping what and how we teach."

Professor David Benyon, School of Computing, Edinburgh Napier University

Edinburgh Napier University's School of Computing worked with NCR to advance its personalised ATM services. The work was led by Professor David Benyon, with support from Dr Greg LePlatre and Tom McEwan.

BENEFITS

Working with NCR has provided staff with the opportunity to work with a large organisation, building supervision and project management skills, and to apply user-centred design methods to the development of ATMs and financial solutions. Staff also gained first-hand experience of designing, developing and deploying a large online survey.

New areas of research have been opened up, concerning the design and behaviour of avatars (screen characters), with work attracting new grants and further KTP projects. Material generated from the KTP has been fed directly into undergraduate courses.

RESULTS

- Enhanced business relevance of teaching and research
- New research links generated
- Established a track record of knowledge transfer activities for the School
- Papers published in conference proceedings and refereed journals