

## **Summary of RFID achievements**

### **Ubiquitous Computing Group**

As at 6<sup>th</sup> Sept 2006

#### **Ubiquitous Computing Group Members**

Dr Judith Symonds – Business process reengineering & interface development

Dr Dave Parry – Location sensing & ontology

Jim Buchan – Database architecture & software development

Dr Andy Connor – Project management & prototype design

#### **Masters project with Fisher & Paykel Health**

Status: Complete

Topic: Use of RFID in the manufacturing line for healthcare devices

#### **Laundry shrinkage project with Taylors Commercial Laundries (a division of Spotless)**

Status: Project initiation – hoping to set up a TIFP funded masters project

Topic: Use of RFID to automate and track laundry shrinkage

#### **Assisted living Project**

Status: under way

Funding: Faculty Contestable grant for equipment and research assistance

Topic: Use of a portable RFID reader to track losable objects in a location based land mark home environment.

Novelty: Low cost/ low infrastructure solution suitable for the home environment.

Staffing: 2 parttime research assistants and 3 undergrad project students

Collaborators: Dr John Collins, AUT Engineering (RF signal & microprocessing)

Dr John Ayoude, University of the South Pacific, RFID security

Prof. Kathryn McPhearson, AUT health, therapeutic training

Prof. Philip Sallis, AUT, project mentor

#### **Publications**

Basrur P. & Parry D. (2006) “Where are my Glasses?” an object location system within the home, BACIT 3(3)

Houliston B. (2004) “ Factors Influencing the Adoption of RFID Technology in the New Zealand Hospital Environmnet” M. Info Tech Dissertation, Auckland University of Technology.

Karlsson G.P. (2006) “Where and how can Radio Frequency Identification (RFID) technology be used in the internal supply chain? A case study at Fisher & Paykel Healthcare” MCIS Dissertation completed at Auckland University of Technology on exchange from The Royal Institute of Technology, KTH, Sweden

Karlsson G.P. & Symonds J.A. (2006) "Auto-Identification Technologies: RFID vs Barcode in the Supply Chain", BACIT 3(3)

**Publication in progress**

Karlsson G.P & Symonds J.A. "Using RFID in Supply Chain Management for High Value Products with Traceability Requirements: City Healthcare" submitted to International Journal of Cases in IT, September 2006.

**Equipment**

HF Long Range RFID reader, loop antennae & selection of passive tags

CF Omron reader

2 hand held Pocket PCs

3 leased PCs

Shared project room

Volt meter and selected tools