Welcome to this the inaugural issue of the *International Journal of Pervasive and Ubiquitous Computing*. I see this journal as serving as an outlet and communication medium for research undertaken to understand the significant challenges for Information Systems in the emerging world of pervasive and ubiquitous data modelling and reporting. For example, during September, I saw a presentation done on the inventory positioning system implemented at EastPac, A Kiwi Fruit pack house. Although the RFID positioning system, indoor vehicle tracking system (using 2D barcodes) is a technological revolution, there was not value for EastPac without a visual representation of the information. Technical data such as the serial number of the pallet that is currently stored 25 meters from the west wall and 60 meters from the south wall of the pack house is not useful. What was useful was a graphical display mirroring the layout of each of the pack houses and a graphical key (in this case, green open square, palette of fruit at ground level and green shaded square, palette of fruit stacked one palette high) which has mean-

ing for the warehouse managers. Where the warehouse handles different varieties of kiwi fruit, these can be shown as different coloured squares - gold squares, for kiwi gold for example. The real key to this system is that it can show data anomalies. That is, the system can show were three palettes of fruit were recorded as being stored where the business rules told the developers that there can only be palettes stacked two high. Such data anomalies were shown as pink shaded squares in this particular system. I am not sure of the significance of the ‘pink’ colour, however, the graphical representation of this anomaly means that the warehouse manager knew ahead of time which of the palettes is misplaced and during a slack time, the warehouse manager could even undertake a process of checking and confirming which would resolve the pink squares in the system.

Interestingly, initially, the fork lift drivers were not open to having their fork lift tracked. During the early stages, drivers turned the system off and failed to replace batteries. However, as they used the system they realised that the
system offered protection for them. For example, if a fork lift driver had an accident during a night shift, the operator is immediately identifiable, thus eliminating all other drivers from suspicion. In another anecdotal situation, the developers told us about how three fork lifts were stopped while the drivers took a break. The warehouse manager walked by and was immediately suspicious about how long they had taken on their break. The manager checked immediately on the indoor vehicle location system and found that the fork lift drivers had only been stationary for 3 minutes. So the fork lift drivers were vindicated and of course forgiven.

The monetary benefits of the RFID indoor inventory positioning system are immediately apparent. However, the intangible benefits of the system are that the graphical interface made the warehouse manager’s job less stressful because there were no surprises in terms of lost palettes of fruit at the time of loading. It also made the fork lift driver’s job less stressful because the positioning system identifies where the palettes of fruit are and the drivers do not need to maintain tedious methods of replacing all palettes back to their original position in order to keep track of them. The system tracks their position wherever they are moved to. Also, the fork lifts are more efficient since they know the exact location of each palette on the picking list for a particular order and they can go immediately to that palette.

Graphical user interfaces, you might say, are nothing new there. Decision support systems, are also not new to Information Systems. This is for certain. However, the current graphical user information system at EastPac was purpose built and it shows crude information compared to the richness of information available in the indoor tracking system. There are many aspects from the representation of moving and directional data through to artificial intelligence of decision support systems opportunities that exist for Information Systems researchers in this application alone.

The four articles in this issue have a distinctive healthcare theme. In the first article by Bill Hardgrave and others from the Walton College of Business, University of Arkansas, United States of America you will find a framework for the application of smart technologies, in this case RFID, in the healthcare environment. Their proposed framework has potential to be applied across a wide range of Healthcare applications. It follows that the second article explores the application of RFID in a specific aspect of Healthcare, specifically health and fitness. Corey Graves and others from the North Carolina A&T State University, United States of America, investigate making circuit training at the gym much more personalised and rewarding through the recording and use of pervasive and ubiquitous data. Their proposed system has commercial potential as well as being a rich testbed for modeling and design of ubiquitous systems. The third article addresses some of the security issues of more sensitive hospital data. John Ayoade and others from initially the University of South Pacific, Fiji, consider the potential of storing sensitive data-on-tags
and therefore the need for authentication of readers and potentially encryption of data on tags. The final article considers the convergence of information and data on a mobile phone platform. Po-Chien Chang of the School of Business Information Technology, RMIT University, Melbourne, Australia investigates technology acceptance of multi-function devices.

I hope that you will be inspired to send me your own work in this area so that together, we can begin to capture and harness some of the things about ubiquitous and pervasive data that can make our lives richer and more fulfilling. Because of the new system at EastPac, warehouse managers will no longer throw their keys and mobile phones down in frustration at not knowing where their inventory is. Warehouse managers can now be a little less stressed and frustrated and for once, it is an information system that is facilitating that, not fuelling it.

REFERENCES
