

University of Pretoria makes global IT contribution

The University of Pretoria is conducting research that is producing valuable information that has not only a local, but also an international significance.

This is the view of Dr Sandra Johnson, senior technical member and insurance architect at IBM in the USA. Dr Johnson was the keynote speaker of the first IT research day of the University of Pretoria's School of Information Technology (SIT).

"I think the research conducted here is very important and many of the areas are very useful not only to the South African community, but to African and global communities," said Dr Johnson.

The IT research day brought together staff from the three departments in the SIT: Computer Science, Informatics and Information Science. "The purpose of the IT symposium was to communicate what research we are doing and to stimulate interdisciplinary research between the three different Schools in the SIT," said Prof Jan Eloff, then Chairperson of the School.

Dr Johnson's keynote address focused on innovation that matters and highlighted the fact that any research developments should, ultimately, benefit users. Dr Johnson said she was impressed with the research initiatives of the SIT. "There's a lot of diverse research going on here that will produce valuable results that will be significant to the world. Look at the research into translations or the health information systems. This is important research," she said.

Dr Johnson explained that certain research initiatives at IBM were also aimed at making an impact worldwide. She said the company used a Global Technology Outlook (GTO) and Global Innovation Outlook (GIO) as tools to further progress within IBM. "The GTO is an early identification of significant

trends and the GIO seeks to frame problems that, if solved, can have tremendous societal and business impact. The GTO and GIO principles can be applied to research initiatives elsewhere," said Dr Johnson.

In the context of practical research to fuel innovation, Dr Johnson expanded on IBM's concept of InnovationJam, a collaboration between dozens of companies, organisations and IBM family members to yield first-of-a-kind opportunities. The InnovationJam generates understanding around new, emerging technologies and provides the potential to jointly pursue new products and opportunities. Some of the top ten opportunities identified through this process include smart health care payment systems, real-time translation services, 3D Internet, branchless banking for the masses, developing electronic health record systems, water filtration systems (using nano-technology) and practical solar power systems. "In the same way, the University of Pretoria should research practical solutions and identify industry partners for funding. This is, essentially, why a day such as this research day is important. It showcases innovation and provides a platform to market ideas," she said.

The SIT follows a research strategy that aims to be nationally and internationally relevant and competitive by focusing on 11 focus areas. The research initiatives cover a broad spectrum of information and communication technology (ICT)-related fields such as computer science, informatics and information science.

The leaders of the various research programmes also spoke at the IT research conference and highlighted their research areas, providing feedback on the status of their efforts. These research areas included feedback from the Meta-context of Information Research Group, the Health Information Systems Research Group and the Knowledge Management Research Group.

The Health Information Systems Research Group, for instance, explores how modern ICT may best be adapted and used in developing the health sector,

while the Espresso/FASTAR Research Group seeks to combine theory and practice to enhance the efficiency and effectiveness of software and its development. "The symposium is useful in communicating to our partners and external parties what research we are doing. This will definitely become an annual event," explained Prof Eloff. 