

Technology innovation to mark out future business leaders

The business leaders of the future will be those who identify the next generation of technological innovations and advances.

That was the view put forward by Dr Rias van Wyk, director of the Technoscan@ Centre in the US and recently appointed to the jury of the Globe Award for Sustainability Innovation, who spoke on the topic Stimulate economic recovery – with technology-based innovation! as part of the University of Stellenbosch Business School's series of Leader's Angle talks.

Van Wyk says it is by grasping the opportuni-

ties that are waiting to be discovered that technology will contribute meaningfully to stimulating the world's economy. "We have technologies that are currently in use, we have technologies that are emerging and we have technologies that are latent in the future. It is the people who identify these

technologies who will be the business leaders of the future."

He said that as a world economy, it is vital that we start to look beyond the current view of technological capabilities into concepts that have so far been unexplored. "There are a number of new technological con-

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cepts that have the potential to be investigated, such as the transport of light. By managing this process, we could learn how to store light which could result in innovative concepts such as light batteries."

Other potential innovations highlighted included intelligent and active packaging, magnetically levitated devices and solar tubes that could provide a massive advance in the field of energy-saving.

Van Wyk also highlighted wireless innovation as holding a key to further technological development. "Sensors can already be placed deep into processes and then subsequently be activated wirelessly. With its capability of transporting energy, the potential of wireless could be massive in the future. The wireless transmission of energy is a great technology that is on

the watch list."

He says there are three questions that need to be addressed in terms of strategic planning: "Where are we? Where do we want to go? And, how are we going to get there? In addressing these questions, we need to begin thinking of industries in a 360° fashion by matching capabilities and opportunities."

In terms of business leadership, van Wyk said we need to start improving techno-economic mapping through employing radical new tools such as a "conspectus" of the technological landscape and metrics to quantify technological progress.

The conspectus – a simple overview of technology, but based on a unifying theory – offers four possible models:

- Personal pragmatic – not formalised and no unifying theory

ing theory

- Thematic – partially formalised, based on scientific categories and no unifying theory
- Economic – formalised, based on economic categories and a unifying theory
- Functional – formalised, based on technological categories and a unifying theory.

He said there are three trends of technological progress for which metrics should be found to express each trend: the ability to do more with less, take less time while doing so, and use less space in the process.

Van Wyk concluded by noting that it is the employment of these concepts that will lead to an improvement in matching the technological capabilities with the potential opportunities, which will help to stimulate economic growth.