One are the days when agriculture, industry and – more recently – services were the great wealth creators. Over the past decade, knowledge has been the biggest creator of wealth and it is the knowledge economy that has to create a sustainable, competitive environment, says Dr Juani Swart, professor extraordinaire in Knowledge and People Management at the USB and director of the Work and Employment Research Centre at the Bath University School of Management in England.

The idea that knowledge plays an important role in the economy is not a new one, says Prof André Roux, director of the Institute for Futures Research at the University of Stellenbosch. “All economies, today and in history, are based on knowledge of how to farm, how to mine and how to produce goods.”

The American industrialist Andrew Carnegie realised this a century ago, saying that knowledge and the ability of employees is the only capital a company cannot replace. The productivity of this capital depends on how effectively employees share their knowledge with the employees who need to do the work, Carnegie said.

“What is different today is the increasing intensity of the knowledge, as well as the speedy globalisation of economies,” Roux says.

Knowledge management should be on the strategic agenda of all businesses, Swart says, and it should fit with the culture, structure and management processes of the organisation.

“Knowledge is incredibly important and it is unique. All other resources can be copied by competitors,” she says. “Companies need an open culture that drives organisational learning and the renewal and sharing of knowledge. We, as a society, must move away from a culture that says knowledge is power. Knowledge is dynamic and the more we share knowledge, the more the individual and the organisation will learn.”

Companies should spend time on understanding what strategic knowledge exists inside and in the networks outside the company. Merely implementing expensive information technology systems won’t help – knowledge must also be managed appropriately, says Swart.

An inverse relationship exists between knowledge and technology: the more specialised the knowledge, the simpler the technology that is needed, according to Swart.

“If you’re looking for sophisticated knowledge, technology can send the user in the right direction, for example by saying who the expert in the organisation is. On the other hand, less sophisticated knowledge needs more sophisticated technologies such as databases,” she says.

However, staff must have the desire and the motivation to share knowledge. In companies where employees have a strong loyalty to the organisation – usually companies with a strong values-based culture – and where employees are offered the space to work with freedom and autonomy and are allowed to develop
their own knowledge, it is easier to implement a successful knowledge management strategy, says Swart.

Workers must be encouraged to share knowledge in a way that they are comfortable with, and there must be recognition for the knowledge they share, she says.

“It doesn’t help to focus on only one of the empowerment mechanisms. Firstly, the strategically important knowledge must be identified, and then the company must ensure the right culture, technology and structure are in place to support the knowledge strategy. When you have a strategic knowledge management system in place, it must be re-evaluated and adapted continually.”

According to Marius Ungerer, professor in strategic management at the USB, knowledge-based organisations are playing a more central role in both developed and developing countries. The contribution of developing countries to the knowledge economy is increasing, but the biggest investments in research are still done by countries like Japan and the US, and now also China.

While developing countries increasingly gain access to new technologies, access alone is not enough. “It is about more than registering new patents. Companies must have the knowledge to harness new machines and technologies optimally,” says Ungerer. “The challenge of knowledge management is to record and share this knowledge.”

According to Ungerer, Sasol and SABMiller are examples of South African companies that successfully apply locally developed and unique knowledge to succeed internationally.

The emergence of new economic giants like China, which are increasingly investing in the development of new knowledge, should not have to mean that the West will lose its competitive advantage over time.

“All other resources can be copied by competitors. Knowledge is the only unique resource.’

‘Staff must have the desire and the motivation to share knowledge.’

“The benefit of knowledge doesn’t have to end in a game where one party does not benefit at all,” Roux says. “The challenge for any country or company in the knowledge economy is to ensure that it remains at the cutting edge of the generation and analysis of relevant knowledge to use (new) resources more effectively to produce (new) products and services.”

According to Ungerer, governments play an important role in establishing a knowledge economy and in helping organisations to compete successfully in a world economy where knowledge is of increasing importance. The most important input for successful, knowledge-driven companies and economies is the quality of a country’s human capital. It requires a healthy school system with quality maths and science education in particular, and governments that make capital available for research and development, he says.

In addition, favourable environments should be created that are attractive for high-level knowledge management people to work in. The creation of innovation parks in Gauteng and Cape Town is a step in the right direction, says Ungerer.

“Government and the private sector must take hands and combine South Africa’s unique knowledge to the advantage of the country as a whole,” he says.