



# Opening address by Minister Mosibudi Mangena at the Technology Top 100 Awards ceremony

Date: 2009-02-26 22:00

Venue: Victor Theatre, Johannesburg

Type: Minister

Content:

Mr Seth Phalatse, Chairman of Da Vinci Holdings;

Prof. Roy Marcus, Chair of the Technology Top 100 adjudication panel;

Dr Phil Mjwara, Director-General, and the Deputy Directors-General of the Department of Science and Technology;

Distinguished guests;

Allow me to first extend a special warm welcome to my predecessor, Dr Ben Ngubane, who was the Minister of Arts, Culture, Science and Technology in the first democratic government of 1994. I am very happy to see you here tonight, and imagine you must be pleased since it was under your stewardship that these awards took on the significance they have today.

Thank you all for honouring us with your presence here tonight.

Tonight is all about accolades. The Technology Top 100 Awards are the Academy Awards of South African technological innovation and achievement, and aptly, these events occur within a few days of one another.

We are paying tribute to the people who have done the hard work. And we are publicising their achievements in the hope that others will take note and follow suit. We call on the people of our nation to look with pride on those who have made the technology that can add value to the business activities of investors, and benefit the South African economy.

The organisations to be honoured here tonight represent a cross-section of the private and public sectors. Through their innovative approaches, they have responded to the challenges in fresh and unexpected ways; and as worthy competitors, made their presence felt at local and international levels. In doing so, they have added new chapters to the great South

African story, which is a tale of obstacles overcome, sceptics defied, and giant opponents humbled.

Another pleasing element is the spread of organisations that qualified for the awards. Over 50% can be defined as emerging companies. Equally pleasing is the fact that large South African companies are represented in numbers. We thank and congratulate the organisers for this.

The whole process is particularly interesting from my department's perspective in that it gives us ongoing information on the changes we might need to make from time to time to increase our technological competitiveness as a nation. After many years of analysing data from the TT100 awards, it was found there was strong evidence linking the success of globally competitive organisations to their ability to focus their strategies on the TIPS model; that is, the process of being excellent in the management of technology, innovation and people within a systemic context.

The TT100 adjudication process should be viewed in the light of the 2008 report of the Organisation for Economic Cooperation and Development, which looks at a number of very important indicators for South Africa's innovative capabilities.

There are two other important aspects to bear in mind. First, government defines innovation as the total process of taking a good idea and converting it into a product, a process or a system, which has either commercial or social value. Second, the concept of a national system of innovation, which dates from the 1996 White Paper on Science and Technology, firmly asserts that innovation is fundamental to economic growth.

The OECD report points to a common thread in approaches to the innovation process among all countries reviewed. Three modes of innovation are acknowledged.

1. New to market innovation, in which organisations generate their own technology through in-house research, development and patenting.
2. Processes of modernising, in which organisations make use of embedded technology, including the acquisition of machinery, equipment and software, and place emphasis on training.
3. Wider innovation, which clusters organisational and marketing-related innovation strategies.

As the results of the adjudication process will reveal, in our own case, and in this awards process, the selection of these modes of innovation is evenly spread.

However, it is evident that South African organisations are paying less attention than they should to the protection of intellectual property through patenting. Many of our organisations appear to lack confidence in the patenting process, possibly because full international patent protection is so costly.

It is also informative to note that many South African organisations have adopted the third strategy, and are developing a marketing approach based on technology-led innovation. This is a very encouraging sign, and lends weight to the decision to focus tonight's awards on the abilities of South African companies in terms of the management of technology.

Apart from the revelations of some disturbing trends, the OECD report has further good news when it compares South Africa with a range of developing and developed countries. The fact that my department has successfully persuaded government to increase its investment in R&D is seen as a good thing; particularly the increases that have been implemented since 2004. The department is also commended for the sharp increase in international funds to support research and development in our country. These are seen as hard evidence for our determination to place science and technology at the top of government agenda.

However, there has been a disturbing decrease in spending by industry on research and development at the tertiary institutions. I need to also ask why, despite encouragement from my Department, no university and only two science councils have been willing to subject themselves to the TT100 adjudication process.

I am informed that information extracted from the details provided as part of the TT100 entrance papers, strongly suggest that state-funded science councils and universities are not considered as organisations which you would wish to partner with in terms of furthering your research and development aims. I am worried about that perception, and I believe you should be too.

We are, however, working on the problem. Many of you will recall that when the National Research and Development Strategy was published some years ago, one of its specific objectives was to narrow the 'innovation chasm' or the mismatch between the research and development endeavours of higher education institutions and the needs of South African industry, or between the academic and the pragmatic - if you prefer. The strategy also recommends that a single entity should be created to channel the funds required to narrow this gap.

Now, I am pleased to report that we have formalised the establishment of the Technology Innovation Agency. The Act establishing TIA states that "The object of the Agency is to support the State in stimulating and intensifying technological innovation in order to improve economic growth and the quality of life of all South Africans by developing and exploiting technological innovations".

With this agency in place, we are optimistic we will soon see state-funded institutions becoming more active in seeking partnerships between and among themselves and private and public sector organisations represented here tonight. It is also my responsibility to make organisations like yours more aware of the numerous benefits to be derived by partnering with appropriate institutions of research and higher learning.

This must be a win-win situation, and it is a key element of our country's prospects for economic growth.

On this, the 20th occasion of the Technology Top 100 awards, I understand the organisers of the programme have been digging deeply into the profiles of the winners, and that they found a number of characteristics which made these organisations stand out.

First, is the presence of a constantly interrogating and questioning mindset. For example, a segment of successful South Africans seem to have the ability to look at what is internationally regarded as a failed technology and, by asking the right questions, find innovative ways to make it work. There are numerous examples of this, including SASOL and the Pebble Bed Modular Reactor. It seems those who constantly question almost always come up with answers.

Another characteristic of the winning organisations is the art of creating an operational environment conducive to innovation, and one which brings a sense of ownership, pride and belonging to their employees. The history of the Technology Top 100 programme is rich with anecdotal evidence about innovative ways that winning organisations have used to gain the support of their employees, and to develop an innovative corporate mindset.

Thirdly, perhaps most importantly, is the air of confidence and optimism that pervades the culture of these organisations. The companies are so confident that they are willing to subject themselves to a three-hour adjudication process. And they are so confident that they come out still smiling at the end of it.

Last year, the first attempts were made to develop a TT100 network. The process was so successful that it will be repeated again tonight. We believe the simple act of participants getting to know one another could have significant benefits. Who knows what such connections could lead to? Something innovative perhaps? I urge you to take advantage of the networking process that has been organised.

I believe many of you will be pleased to hear that the organisers of the TT100 are extrapolating quantitative data from the adjudication processes to produce information about some useful trends from which we should all benefit. Government can use it to inform policy-making decisions. And your organisations will be able to benchmark themselves against other players in their particular industry sector.

Tomorrow morning I will have the honour of addressing the National Advisory Council on Innovation, and would like to wind down this address by touching on a topic I intend raising there. And that is, the question of how, confronted with encouraging innovation, the department can create a climate in which innovation can flourish. The department is like a national roads agency for the traffic of innovative ideas. It determines where a road can lead to; what better ways to get from A to B; what better signage to use to prevent vehicle X from going to C when its declared intention is to get to D, etc. I believe we can make it easier for our role players to be more constructive and productive by removing some of the obstacles.

Technology Top 100 is about the participants. I applaud you all for your involvement and for having come so far in the process. Over 250 participants took their places in the starting blocks this year. I congratulate the winners and those who didn't on the courage you have

shown by your willingness to open discussion on the future of your organisations in front of a formidable team of adjudicators.

My sincere appreciation goes to the adjudicators, and to the organising team for making tonight's event possible. I take this opportunity to wish everyone here success in the coming financial year, and encourage you to participate again next year. Tonight reassures us that as a country we have nothing to be ashamed of in terms of our ability to manage technology and use technology-led strategies to establish our position in the most competitive international markets.

You've probably heard about the man who was shipwrecked on an island, and spent four months eating mangoes, drinking coconut milk and feeling bored. Then one day a rowboat arrived with a beautiful young woman who told him that she too had been shipwrecked, and was living on the opposite side of the island. She had built the boat - a beauty - with her own hands.

The young woman invited the man to her place, where he found she had built an impressive-looking house, with a working shower, well-designed furniture, and even a still. Leaving the man abash with astonishment, the woman went off to change into something a little more comfortable and returned looking very alluring.

She said, "We've been alone for a long time, you and I. Is there anything you really miss, something it would be really nice to do together right now?" He looked at her in admiration.

"Don't tell me you've got an Internet connection," he said.

I wish you a good evening. Thank you again.