## Better than expected results from first official innovation survey

South Africa's first official innovation survey, which was carried out by the HSRC's Centre for Science, Technology and Innovation Indicators (CeSTII), revealed that the country's enterprises are more innovative than previously thought, WILLIAM BLANKLEY, CHERYL MOSES and MICHAEL KAHN found.

THE SOUTH AFRICAN NATIONAL INNOVATION SURVEY 2005, commissioned by the Department of Science and Technology, found that nearly 52% of the enterprises surveyed reported innovative activity. This rate of innovation is well above the average for European enterprises of 42% for 2004.

At the launch of the highlights of the research at the Johannesburg Securities Exchange in Sandton on 11 April 2007, deputy minister Derek Hanekom expressed delight at the findings.

The 52% of enterprises that reported technological innovation activities, comprising

both products (goods and services) and process innovations (Figure 1), is at the same level as that recorded in Denmark and Ireland and slightly more than Belgium (51%) and Sweden (50%).

To remain competitive and keep pace with global and local trends and developments, firms have to be innovative. Innovation is considered to be the key driver of economic progress. Business innovation is vital for raising the productivity, competitiveness and growth potential of modern economies.

National innovation surveys of the business sector are the main statistical instruments used to measure the amount of innovation in

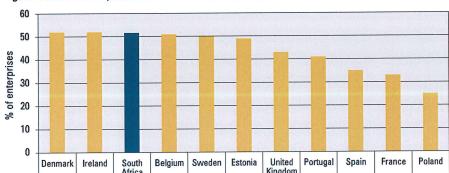


Figure 1: Share of enterprises with innovation activities (%), 2002-2004

Table 1: Proportion of innovative enterprises that reported significant organisational or marketing changes, 2002–2004 (%)

Proportion of enterprises with innovation activities	Total	Industry <sup>1</sup>	Services <sup>2</sup>
Organisational innovations			
Knowledge management systems to better use or exchange information	52.6	48.3	56.4
Major changes to the organisation of work	54.1	36.3	69.9
External relations with other firms or public institutions	27.3	13.7	39.4
Marketing innovations			
Design or packaging of a good or service	36.4	30.8	41.3
Sales or distribution methods	22.6	18.7	26.1



a country. Innovation activities comprise the generation, use and diffusion of new knowledge, as well as methods, processes and products within organisations and in the market. These surveys also provide data on the importance of different sources of information for innovation, barriers to innovation and sales of innovative products.

It is important that South Africa is able to compare itself internationally, and for this reason the South African National Innovation Survey 2005 was conducted in accordance with the latest European Union Community Innovation Survey (CIS4) that was used in all EU and most Organisation for Economic Cooperation and Development (OECD) countries. The base guidelines for such surveys are embodied in the OECD/Eurostat

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Oslo Manual. Such surveys also form the basis for those conducted in China and those being planned in India.

According to the results of the South African National Innovation Survey 2005, innovative firms in South Africa spent a total of R27.8 billion on innovation activities in 2004, representing about 2.4% of the total turnover of all enterprises covered in both the industrial and services sectors.

Good news for government is that at least 10% of firms reported having received public funding for innovation activities from public support programmes. These include funding agencies such as the National Research Foundation (NRF) and public support programmes such as the Innovation Fund and the Technology and Human Resources for Industry Programme (THRIP). The innovation survey has been able to demonstrate objectively that programmes are having a penetrating effect in the private sector and are contributing demonstrably to the bottom line performance of South African businesses.

The benefits of supporting innovation are also clear. More than 10% of turnover from product innovators, or R67.8 billion, was accounted for by goods that were new to the market. If the contribution of products sold that were only new to the firm is included, the total of sales generated by new or significantly improved products exceeds R147 billion.

Previously, innovation surveys were confined to technological innovation, but they have recently been extended to include other forms of innovation, such as organisational restructuring and new marketing methods. In innovative businesses in the service sector nearly 70% of innovative enterprises with

product innovations also introduced major changes to the organisation of work<sup>3</sup> during 2002-2004 while about 56% adopted new knowledge management systems (Table 1).

Marketing innovation<sup>4</sup> was also more prominent in the service sector with more than 40% of innovative enterprises reporting significant improvements in design or packaging of goods and services and at least 26% introducing new distribution and sales methods.

In terms of the outcomes of innovation, innovative firms clearly have a focus on customers or clients and nearly 45% of them indicated that the most important outcome of innovation was the improved quality of goods and services. Still focusing on customers, other important effects of innovation were increasing the range of goods and services offered and gaining entry into new markets as well as increasing market share. The reduction of labour costs and material and energy costs were considered less important, indicating that innovation should not be feared as labour-reducing. Successful innovations are more likely to result in greater production and outputs leading to increased demand for labour.

In conclusion, the innovation survey has been very useful in bringing South Africa in line with international best-practice reports on innovation. The methodology was generally the same as for all EU and most OECD countries and thus we can benchmark ourselves internationally.

The survey results are the property of the department of science and technology and once accredited should form part of the series of official S&T statistics of the National Statistics System. The survey results provide policy-makers with new insights into the dynamics of innovation and R&D and should contribute to the development and improvement of policy.

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<sup>1</sup> Industry = Mining and Quarrying; Manufacturing; Electricity, Gas and Water Supply.

<sup>4</sup> A marketing innovation is the implementation of new or significantly improved designs or sales methods to increase the appeal of goods and services or to enter new markets.

<sup>&</sup>lt;sup>2</sup> Services = Wholesale and Retail Trade; Transport, Storage and Communication; Financial Intermediation; Architectural, Engineering and other Technical Activities.

<sup>&</sup>lt;sup>3</sup> Organisational innovation is the implementation of new or significant changes in firm structure or management methods intended to improve a firm's use of knowledge, the quality of goods and services or the efficiency of work flow.

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