How much control should be placed on the internet?

As we enter the fourth industrial revolution questions of security arise

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A RISING trend is remote workers, able to deliver results by working on their computers from anywhere in the world, thanks to the global and fast internet.

The tribe of skilled workers will likely grow and be distributed across many countries, while not paying taxes anywhere and not being accountable or loyal to anyone.

Dual taxation could perhaps assist, but is yet nowhere near the required ubiquity in its application.

If the industry will use equipment imported from abroad and monitored, diagnosed and controlled from abroad, how much skilled employment will this leave to a nation?

If many home services are provided and therefore controlled by global corporations, how much unskilled and semi-skilled employment will still be available?

Most online services are likely to be hosted from a few technologically leading countries – expressly, by the global companies actively investing in developing vertical industries.

These are steadily rising threats to the economy and jobs in the country.

The fourth industrial revolution (4IR) is like a giant ocean wave. One would find it difficult to run from it. Yet, one can ride it or generate national income from it to compensate for the direct losses.

As the services provided from abroad will hurt the local industry, the big question is whether local taxes can be applied to selling products and improvements. Will the international giants keep the profit, or can the user's country share in it and use it for its citizens?

Developing countries will surely be hit the hardest as foreign competition will reduce the growing, yet thin middle-class of local professional workers in the same trade.

ALTHOUGH some of the questions about the fifth generation (5G) of cellular networks raised by US President Donald Trump's administration may be due to attempts to control the market, such global connectivity-related threats are a reality, the writers say.

National security is an important consideration as well. From where, in the global market, will the remote services and their control come?

Can the information collected by the services be compartmentalised?

US President Donald Trump's administration already raises such queries about Chinese equipment for the fifth generation of cellular networks (5G).

Some of this may be due to attempts to control the market. Yet, such global connectivity-related threats are a reality and will likely continue to grow.

The expert groups that started working on defining the likely focus of the future cellular 6G, have listed trust, security and privacy as the key elements to be addressed.

The national government has a duty to control the use of the national natural resources and provide services to the people in the country.

A significant impact of the 4IR is due to globalisation, and there is a need to start devising the appropriate global and national strategies to provide ways and regulations to protect the national economy.

The impact will be especially acute in developing countries that have far fewer knowledge workers and are less established and, thus, have slower-growing intellectual property bases.

This builds towards another critical question: What can be done to benefit from the 4IR?

The most sustainable and truly long-term approach is to become a more active and knowledge-based player in the new global economy, through upskilling and investing in local research, development and innovation (RDI).

South Africa has a good track record in innovation. For example, the Council for Scientific and Industrial Research has developed autonomous 3D navigation, enabling a robot system to navigate autonomously in between indoor and outdoor environments without assistance from GPS.

The organisation also launched TVWS technology, which enables better connectivity for rural villages.

How can we spread drive for innovation nationwide?

In the economy interconnected via the internet, RDI requires skills. The development of relevant skills is a long-term investment, which generally requires decades of continuous and devoted change.

For instance, improving school education alone requires a transitional decade for the change to propagate and to start bearing the fruits. The overall change will need at least several decades. This includes increasing the scale of university education and the number of quality graduates to the level of leading countries, and that will require a substantial financial investment.

This also includes increasing the proportion of the knowledge-based economy.

The growth and preservation of the local internet-linked markets and entrepreneurship could perhaps be supported via local and global import/export regulations.

However, online services have a non-physical nature. Thus, the enforcement of those regulations could only be possible by regulating internet traffic at national borders, as we do with the physical borders.

The control of the internet has been employed by China, Russia, the UK and the US.

It is sometimes considered to be an issue of net neutrality as the government receives means to effect the prioritisation and control of and access to the internet traffic and, thus, internet-based services.

Such control will also require careful use of the regulatory powers so as not to over-regulate and weaken the local market.

Is there an alternative?

Should a harmonised solution not be explored by many nations united together?

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