

The potential to create jobs in the ICT sector

1. Problem statement

The Information and Communication Technology (ICT) sector in South Africa is an important component of the national economy. Technology is involved in almost every facet of the economy – from telecommunications to increasing productivity in manufacturing with robots, and more efficient computer hardware and software.

According to Statistics South Africa in 2014 the ICT sector's contribution to gross domestic product (GDP) was R114 487 or 3% of the GDP. In 2014, South Africa was a net importer of ICT products and services with an estimated ICT trade deficit of R97 189 million. South Africa imported ICT products and services of R130 983 million and exported ICT products and services of R33 794 million. ICT imports contributed 10,4% of total imports into the economy, whilst ICT exports contributed only 2,8% of total exports. The largest imported ICT product was radio, television and communication equipment (R62 237 million).

In 2014, telecommunication services contributed 1,9 percentage points towards the total ICT sector contribution to GDP (3,0% of total GDP), followed by related industries (contributing 0,5 of a percentage point), computer services and activities (contributing 0,3 of a percentage point), manufacturing (contributing 0,2 of a percentage point), and content and media (contributing 0,2 of a percentage point).

The negative trade balance shows that we are exporting jobs by depending on foreign produced ICT goods and services. This is an indication that we are lagging behind as a country in terms of the fourth industrial revolution.

South African ICT companies rank among world leaders in areas such as mobile software, electronic banking services, prepayment, revenue management, fraud prevention systems and the manufacture of set-top boxes⁴, with some of the products destined for the export market.

The MICT Seta reports that in 2012 the number of employees by race in the telecoms sector was 36 686 black versus 18 013 white (i.e. approximately 67% black). However, it is trite that due to job reservation policies blacks occupy manual unskilled posts.

2. Policy levers

The ICT goods and services sectors must be classified as a strategic sector. There must be deliberate policy measures to increase SA government intervention in the sector and increase in market share for local companies including through the following;

1. ICT subsectors must be designated for local procurement at higher levels of local content. Sectors that have been designated include set top box sector which is designated with a 30% minimum local content threshold and the minimum thresholds for local production of DTT Antennas and Satellite DTH Dish Antennas which have been set at 100%. This should include manufacturing of hardware and software and electronic manufacturing. This should be extended to the private sector and not only to government.
2. An industrial policy action for the electronics manufacturing industry similar to the Automotive Production Development Programme (APDP).
3. Trade remedies to address huge ICT imports through the means of increasing tariffs for the electronics industry.
4. The focus on removal of barriers and liberalisation has not helped in the development of the local industry and innovation. The local IT software sector is largely dominated by big companies such as Microsoft. South Africa's WTO commitments must be reviewed to ensure that they are not a hindrance to the development of the local ICT industry.
5. R&D spending must be increased beyond 1% of GDP. There is a need for the South African Educational System to focus on science, technology, engineering and maths (STEM).
6. SITA must in-source the development of local software and must be at the centre of development of local ICT skills.
7. The Financial sector must be required to buy software exclusively from local companies.
8. Intellectual property must be relaxed so that IPR are granted for improvements rather than production of new products.

3. Risks and challenges

The sector is dominated by foreign companies. There will be a need to increase direct state participation through production of goods and services

and high local content requirements including increasing tariffs to reduce the trade deficit. Foreign companies will not leave as the requirement is that must contribute in building the local ICT industry in return for participating and making huge profits in the economy.

In addition there must be a ban of export of locally created technology, ban on imported technological products; and transfer of technology as a requirement under the national industrial participation programme.

4. Benefits

The development of local ICT industry will create jobs even if most will be non manual skills and decrease costs in the economy and will have positive spinoffs for other industries. The potential to create jobs is huge provided there is will on the part of government and the private sector. Since South African is small market the cost of a forced local production of ICT goods and services will be higher in the short term but the benefits will outweigh the costs in the long term particularly.

5. Way forward

A detailed study is needed to address the specific policy measures as suggested above, to cost the measures and put in timeframes for implementation.