Mauritius is an island in the Indian Ocean, about 800 km east of Madagascar. The capital of Mauritius is Port Louis and other main towns in the country include Beau Bassin-Rose Hill, Vacoas-Phoenix and Curepipe. Mauritius has a population of 1.3 million people, and the island spans 1,865 square kilometres.

The country possesses an immense maritime territory of over one million square kilometres.

Mauritius ranked 1 out of 54 African countries on the Mo Ibrahim Index which offers a comprehensive assessment of governance that informs and empowers citizens, civil society, parliaments and governments as a tool of measuring progress in governance.

As at 2015, data indicated that 90.6% of country's the population is literate.
2. Information Communication Technology

Mauritius has placed increasing efforts on developing ICT in the wish become a regional hub for ICT. It has revamped its ICT industry and has retained its position as the African country with the highest ICT development index. The Ministry of Technology, Innovation, and Communication is responsible for providing a favourable environment to harness ICT to generate employment, increase national wealth, improve quality of life and create new opportunities for sustainable socio-economic development of the country.

Mauritius has invested significantly in developing its ICT infrastructure in order to develop the sector and make access to the Internet a basic right for all its citizens. The telecommunications sector has moved from an analogue network to a fully digital one, endowed with enhanced capabilities in terms of bandwidth, connectivity and value-added services.

The ICT sector has experienced a rapid and sustained growth and is a major pillar of the Mauritian economy. The ICT sector represented only 4% of the country’s GDP in 2002 and has grown to 5.6% in 2016.

The government launched the Lower Indian Ocean Network (LION) submarine fibre cable system, which links Madagascar, Mauritius and Reunion Island, is 1070 km in length, adding resiliency to the country’s connections. To date there is free Internet access:

- 280 computer clubs across 23 youth centres,
- 17 women centres,
- 57 social welfare centres,
- 132 community centres,
- 20 day-care centres and 31 NGOs/Municipal Councils/Village Halls across the island.
- 1.37 million people (including recurrent users) have been able to make use of the facilities listed above.

Access to ICT has been further extended by setting up:

7 Learning Corners in different parts of Mauritius and in 11 other locations with the collaboration of the National Empowerment Foundation (NEF)

As at 5th June 2017, it was noted that about 203,407 persons have followed ICT Literacy and ICT Awareness Courses.

Community Web Portal

The Community Web Portal (CWP), launched in 2013 encourages the development of local content and creativity. It is a platform to facilitate the process for the community to make use of ICT to participate in the socio-economic development of the country. Its objectives are to:

- Encourage the development of local content and creativity;
- Democratise access to information; and
- Promoting community development by enabling collaboration and knowledge sharing and facilitating communication.
Thus far, content for above 100 villages and localities of Mauritius has been gathered. Contents for the remaining locations of Mauritius are being gathered progressively.

The government launched the Mauritius National Identity Scheme in 2013 as a new system that uses Smart identity cards which are more secure and effective.

The e-Prison system was launched in May 2014 for a better management of the prison inmates and a follow-up on their rehabilitation.

In April 2013, an e-Filing System was implemented at the Commercial Court for commercial cases, which impacts on the way cases are filed and processed in the courts.

The NCB ICT Incubator Centre was set up to encourage young entrepreneurs to create start-ups in the ICT sector by providing them with logistic and business support. NCB has revamped its ICT Incubator Centre to a Technopreneurship Programme to encourage innovation and creativity to develop a community of Entrepreneurs in the ICT Sector. The NCB Provides Guidance, Business Advice, Support and Training to Start Ups under its Technopreneurship Programme

Challenges in ICT sector

- The country still requires heavy investment in education and infrastructure.
- Need for more people with ICT qualifications and the speed of connectivity in the country remains erratic, with an average speed of 19.91mb per second.
- Lack of ICT skilled personnel.
- The size and location of Mauritius, and outdated institutional organisation which heightens the regulatory risk, poses a threat to regulatory efficiency, and impedes investment in the sector.
3. Education

The Ministry of Education and Human Resources, Tertiary Education and Scientific Research is responsible for education in Mauritius. Education is compulsory from age five up to the age of sixteen. The present education system allows a student to study for a period of two years at pre-primary level. Children enter primary school at five years of age, where they study for six years. Students must pass a national examination, conducted by the Mauritius Examination Syndicate (MES), to receive a Certificate of Primary Education (CPE) and gain admission to secondary school. Secondary Education is for six years. After the first four of these, students write their O-Levels in at least six subjects. If they wish to, they may remain on for the final two years, in preparation for the A-Level examinations administered by the University of Cambridge. The official language of instruction at all levels is English.

ICT Training

As part of Government’s broader strategy to make Mauritius a regional ICT hub, schools are being encouraged to introduce and adopt ICT as a pedagogical tool across the curriculum. The government has thus invested in providing ICT infrastructure to all schools in Mauritius. In March 2015, 439 of the 939 pre-primary schools (47%) had computers. All primary and secondary schools (general and pre-vocational) were equipped with computers. With regards to internet access for students;

- 10% pre-primary,
- 41% primary, and
- 99% secondary students have access to the internet at school.

Computer-Assisted Instruction (CAI) is where teachers use computers as a teaching tool for presenting instructional material. CAI is almost universal in Mauritian schools. A very important aspect of successful CAI depends on the number of computers available to students – there are computer laboratories in 72% of primary schools and 93% of secondary schools.

Basic education programme

The Mauritius Institute of Education (MIE) is a parastatal body responsible for Research and Curriculum Development. It is the body in charge of developing the curriculum, textbook writing and evaluation. ICT is used as a tool for teaching and learning, as well as a discipline on its own. Overall, a 2015 UNESCO report on ICT in Education in Sub-Saharan Africa found that there was a course in computer skills or computing at Primary, Lower Secondary and Upper Secondary levels.

Challenges facing education sector

- Serious Internet connectivity problems.
- The education system remains decidedly pyramidal, meaning that many children leave the education system due to resource constraints and other reasons affecting the development of the knowledge society because a large number of students do not have the opportunity to upskill themselves sufficiently to be able to contribute in that respect.
4. Science, Technology, and Innovation (STI)

The responsibility for STI in Mauritius rests with both the Ministry of Technology, Communication, and Innovation, and the Ministry of Education and Human Resources, Tertiary Education and Scientific Research. The Rajiv Gandhi Science Centre (RGSC) is a parastatal body working under the support of the Ministry of Education and Human Resources, Tertiary Education and Scientific Research.

The RGSC is active in promoting STI amongst the student population through initiatives such as exhibitions, workshops, lectures, competitions and science shows.

Mauritius is investing in a collaborative research and development grant scheme to promote innovative ideas and commercialize them to create jobs, and ultimately, wealth. The Collaborative Research and Innovation (CRI) grant scheme was launched in 2014, and covers the financing of research and innovation projects, including a collaborative research scheme, small business innovative scheme and research by public sector institutions.

The Mauritius Research Council Business Research Incubator Centre (MRC-BRIC) has been operating since March 2011 and has provided assistance to some 15 pre start-up ideas. Incubatees benefit from regular in-house counselling, meeting with potential venture capitalists, and exposure to business angels.

Challenges facing the STI sector

1. Lack of STI policy to specifically drive the sector.

2. Research priorities are also a challenge because they are determined outside of the African continent.

3. Brain drain. Many talented Africans have left to greener pastures in the west.
5. In conclusion:

- Mauritius is one of the leading countries in Africa with regard to developing a KS. It has a strong infrastructure, and its financial economy is strong.
- Initiatives to create an information society revolve around the instilling of a ‘technology temper’ in Mauritians to bring about increased adoption and usage of ICT, ICT-enabled knowledge networking among citizens, and generally accepting ICT as a stream of professional persuasion at par with others.
- ICT infrastructure is strong and telecommunication rates regularly revised to facilitate ICT growth and boost the competitiveness of Mauritius as a destination for ICT activities. In addition, there are many worthwhile ICT initiatives that aim to integrate ICT into Mauritian society. However, the ICT sector faces serious challenges such as erratic speed of connectivity and insufficient government support to help Small and Medium enterprises (SMEs) integrate ICT into their businesses.
- All public schools are equipped with computers, and there are several programmes and initiatives aimed at introducing ICT literacy into schools. The new national curriculum framework specifically notes that all teachers will be provided with technological skills to manage ICT and social networks, and to adopt ICT-mediated learning. However, challenges that the education system will need to overcome to strive toward a KS include connectivity problems and access to online learning. The quality and relevance of higher education also needs to be addressed to give Mauritius the critical mass of expert scientists it needs to fulfil its ambitions.
- There are no STI policies in the country, but some efforts are being made to grow the STI sector. Mauritius is investing in a collaborative research and development grant scheme to promote innovative ideas and commercialize them to create jobs, and ultimately, wealth. Several organizations contribute to research and STI and there are programmes and scholarships aimed at human resource development. However, there is still much work to be done in the sector and challenges include a brain drain as skilled scientists are leaving the country.

Key Partners

⇒ Ministry of Technology, Innovation and Communication
⇒ ICT Authority
⇒ National Computer Board (NCB)
⇒ Computer Emergency Response Team (CERT-MU)
⇒ The Ministry of Education and Human Resources, Tertiary Education and Scientific Research
⇒ Ministry of Technology, Innovation and Communication
⇒ The Rajiv Gandhi Science Centre (RGSC)
⇒ Mauritius Research Council (MRC)
⇒ Food and Agricultural Research Council (FARC)
⇒ Mauritius Sugar Industry Research Institute (MSIRI)
⇒ Centre for Biomedical and Biomaterials Research (CBBR)
⇒ The Mauritius Institute of Health (MIH)
⇒ University of Technology Mauritius (UTM)
⇒ Mauritius Institute of Education (MIE)
⇒ Cisco Systems
⇒ Microsoft
Mauritius ranked 1 out of 54 African countries on the Mo Ibrahim Index which offers a comprehensive assessment of governance that informs and empowers citizens, civil society, parliaments and governments as a tool of measuring progress in governance.

Internet access for students, 10% pre-primary, 41% primary, and 99% secondary students have access to the internet at school.

As at 2015, data indicated that 90.6% of country’s the population is literate.

The telecommunications sector has moved from an analogue network to a fully digital one, endowed with enhanced capabilities in terms of bandwidth, connectivity and value-added services.

Mauritius is one of the leading countries in Africa with regard to developing a KS.

STI: There are no STI policies in the country, but some efforts are being made to grow the STI sector. Mauritius is investing in a collaborative research and development grant scheme to promote innovative ideas and commercialize them to create jobs, and ultimately, wealth.

INTERESTING FACTS ABOUT KS DEVELOPMENT IN MAURITIUS