In April 2019, Google opened Africa’s first centre for artificial intelligence (AI), in Accra, Ghana. The centre has a multinational team, with software engineers and research scientists hailing from Ghana, Nigeria, Lesotho, Senegal and Uganda, as well as Canada, Ireland, Israel, the UK, USA and elsewhere. The CEO is, himself, from Senegal. In 2018, Dr Moustapha Cissé founded the first African Master’s of Machine Intelligence degree at the African Institute for Mathematical Sciences, with the sponsorship of Facebook and Google. The Accra centre is collaborating with local universities to roll out African solutions to prevailing problems. It intends to provide research grants and PhD scholarships to drive research in AI.

In June 2019, the centre organized a symposium with the Department of Computer Science at the University of Ghana on the theme of challenging the status quo: the role of AI in Africa. In June 2018, Jeff Dean and Moustapha Cissé penned a blog on Google’s AI website announcing the forthcoming AI centre and affirming that, over the ten years Google had been present on the continent, two million Africans had benefited from the company’s digital skills training programme. ‘We’re supporting 100 000 developers and over 60 tech startups through our Launchpad Accelerator Africa’, they said. ‘We’re also adapting our products to make it easy for people to discover the best of the Internet, even on low-Random Access Memory smartphones or unstable network connections.’

The Launchpad Accelerator Africa provides African start-ups with equity-free support, access to Google engineers and intensive mentoring, as well as training in public relations. It accepts applications from top seed-stage African start-ups located in Algeria, Botswana, Cameroon, Côte d’Ivoire, Egypt, Ethiopia, Ghana, Kenya, Morocco, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Tunisia, Uganda and Zimbabwe.

Unlike IBM in South Africa (see Box 20.4), Google has not signed an agreement with the government relating to its corporate social responsibility in Ghana.

Source: compiled by authors
*See: https://www.blog.google/around-the-globe/google-africa/google-ai-ghana/

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### Farmers on how to minimize the use of chemical fertilizers and adopt responsible irrigation practices (Rep. Ghana, 2019)

The government has developed a National Data for the Sustainable Development Roadmap which is prioritizing filling data gaps and encouraging data use. A national platform has been launched to make disaggregated data on the SDGs available to the public. In parallel, Ghana is one of fifteen pilot countries developing an STI for the SDGs Roadmap with an inter-agency team led by UNESCO in this country.

### A presidential council to oversee STI

One provision of the National Science, Technology and Innovation Policy (2017–2027) has already been implemented, with the inauguration of the Presidential Advisory Council for Science, Technology and Innovation in January 2019.

### National science fund in the pipeline

GERD amounted to 0.45% in 2017, a slight improvement over 0.38% in 2010 (Rep. Ghana, 2019). The government reports that one-third (35%) of micro- and small and medium-sized enterprises have adopted improved local packaging technologies and that industry adopted 115 research findings in 2017, up from 70 in 2016 (Rep. Ghana, 2019).

The National Science, Technology and Innovation Policy commits the government to raising GERD to 1% of GDP ‘in the short and medium term’ by combining contributions from the public and private sectors and to 2.5% of GDP in the longer term. In 2019, the government began drafting a bill for the creation of a national research fund, in order to guarantee a more sustainable funding base. Until this is done, it is not clear how funding can effectively cater to the needs of all innovators.

The policy has its shortcomings. The manner in which financial resources will be allocated to science agencies is yet to be addressed appropriately and the Minister of Environment, Science, Technology and Innovation is not a core Cabinet member, although he is entitled to attend Cabinet meetings. On the whole, though, there appears to be a lot of goodwill towards STI in Ghana at the highest levels of decision-making.

### Plans for a research commercialization centre

There are plans to set up the Ghana Innovation and Research Commercialisation Centre to serve as a bridge between the government, public research institutions and industry. In parallel, the National Entrepreneurship and Innovation Plan will assist in the establishment of technology incubators. A Computer Numerical Control Machine Tools Centre is being set up in each of Accra and Kumasi to develop strategic technologies and to provide basic infrastructure for engineering innovation.

Although the revised policy restates some earlier policy objectives, it also introduces some progressive measures. For example, it proposes creating special incentives such as scholarships for university students and graduates studying STEM field. It also proposes reviving the National Science and Technology Museum Project, which has been on the drawing board, astonishingly, since 1965. The policy revisits the concept of science acculturation, advocating a national network of regional science and technology museums.

### Digital Agenda: leaving no-one behind

Ghana was one of the first countries to ratify the Malabo Convention (2014). In 2017, the Minister of Communications, Ursula Owusu-Ekuful, announced the Ghana Digital Agenda as a pivotal government policy at an ITU Telecom World Conference in the Republic of Korea, assuring participants that ‘no-one will be left behind’.

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**Box 18.2: Google opens Africa’s first centre for artificial intelligence**