Executive Summary

Rwanda prides itself amongst Africa's hubs. The country has received global recognition for its expansive mobile network and 4G network coverage, as well as for its local smartphone manufacturing. The number of internet users in the country has steadily increased by +24 per cent between 2020 and 2021.

Despite these developments, Rwanda has a conflicting relationship with the internet and technology more broadly. This becomes particularly obvious when looking at the current policy approaches that the Rwandan government has implemented. Civil society and human rights organisations have specifically challenged the patterns of technological and social governance: Mass surveillance and use of spyware against political opponents, online censorship and the blocking of social media content are particularly worrying. This report presents the state of digital rights in Rwanda in 2022. It reveals the success and achievements that the country has made so far and highlights how the government has used the post-pandemic breakout context to consolidate its powers to monitor critical journalists and bloggers and censoring online content that strays out of the official State narrative.
Introduction

Rwanda is a landlocked East African country that borders Democratic Republic of Congo, Tanzania, Uganda, and Burundi. Rwanda is a relatively small but densely populated country with a population of about 13 million and an estimated GDP of $10.33 billion as at 2021. The official data from the recent national census shows that Rwanda’s population increased by +2.5% between 2021 and 2022, with 50.8% being female, and 49.2% per cent male. About 17.8% of Rwanda’s population lives in urban areas.

In 1994 Rwanda experienced one of the most devastating conflicts in history known as the “Genocide against the Tutsi”. Following the conflict, the country and its infrastructure, civil service, and societal structures were all destroyed. It required starting over and overcoming the most deep-seated of ethnic hatred and vested interests that had erupted into a genocide.

Rwanda performs well under broad indicators of international competitiveness, and continues to enjoy political stability and general security, with low levels of corruption in the public service. Across the state security services, Rwanda ranked 52 globally according to the 2017 Transparency International Corruption perception Index. Rwanda is also among the ten fastest African growing economies, a result of the liberal market and fiscal policies implemented by President Paul Kagame’s administration coupled with very generous foreign aid for development.

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4 Idem.
ACCESS TO INTERNET AND DIGITAL INFRASTRUCTURE
Rwanda prides itself among Africa’s technology hubs and digital development. It has been characterised by a substantial public investment push in areas such as digital infrastructure and digital public service delivery. This has helped the country to achieve some of the highest 3G and 4G network coverage rates on the continent,\(^6\) with fibre optic cables now running alongside main roads, bringing virtually all Rwandans within range of mobile broadband.

Rwanda has also pushed for the local manufacturing of smartphone handsets with the recent launch of Mara phone Group.\(^7\) The different legal and regulatory reforms implemented by the Rwandan government such as the expansion of government e-service offerings have helped Rwanda to emerge as a top African performer in both global “e-government” and the World Bank “doing Business” rankings report.

Further, in the decade through 2018, Information and Communication Technology was the fastest-growing service sub-sector and currently, representing about 1.4 per cent of Rwanda’s gross domestic product.\(^8\) This dynamism was mainly driven by mobile phone penetration and it is estimated that 81 per cent of the Rwandan population has access to a mobile device.\(^9\)

From 2008 to 2018, mobile phone subscribers\(^10\) numbered 9.7 million and the official figures put internet penetration at 58.3 per cent. However, the actual use is estimated to be lower.\(^11\) The Rwandan telecommunication market is occupied by four major players Airtel Rwanda, MTN Rwanda, Liquid Telecom and Broadband Systems Corporation. They offer fixed or landline telephone services, mobile telephone (mainly voice calling data and SMS) and internet data services. The market is regulated by the Rwanda Utilities Regulatory Authority (RURA) which is the State agency responsible for oversight countrywide.

Rwanda’s bold strategies in creating infrastructure for technology have proven fruitful and opened new possibilities. For instance, the use of drones by Zipline (an American robotics company) for delivery of...
medical supplies such as drugs and blood products to rural and remote health facilities across the country improves the efficiency of the Rwandan health supply chains. Today this model pioneered by Rwanda is being replicated elsewhere across the African continent.\textsuperscript{12}

Despite all these achievements, Rwanda still has low human development, and the country ranks 160 out of 189 on the Human Development Index (HDI Ranking).\textsuperscript{13}

**COMPLIANCE WITH REGIONAL AND INTERNATIONAL LEGAL FRAMEWORKS**

Rwanda has signed and ratified several international and regional treaties incorporated into Rwandan law with a bearing on digital rights, such as the International Covenant on Civil and Political Rights (ICCPR) and the African Charter on Human and Peoples' Rights (ACPHR). In 2019 Rwanda signed and ratified the Malabo Convention through Presidential Order\textsuperscript{14} No. 104/01 of September 18, 2019 and the enactment of law No. 058/2021 relating to the protection of personal data and privacy in October 2021 was intended to incorporate the Malabo Convention into Rwandan law. With the passing of this Law\textsuperscript{15} Rwanda has become the third country in East Africa, after Uganda and Kenya, to enact comprehensive legislation on data protection and privacy. More importantly, the law placed a positive obligation on the State to set up adequate safeguards for the right to privacy, including where justifiable targeted surveillance has been undertaken in crime prevention and the investigation and enforcement of laws.

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\textsuperscript{12} How Ghana leveraged its nationwide drone network to distribute PPE available at https://www.flyzipline.com (accessed on December 10, 2022)

\textsuperscript{13} Https://hdr.undp.org/sites/all/theme/hdr_themes/hdr_theme/country-notes/RWA.pdf. (accessed on December 10, 2022)


\textsuperscript{17} Https://www.afrikareporter.com/rwandan-journalist-arrested-over-tax-evasion-story/. (accessed on December 12, 2022)


a conducive climate for freedom of expression remains tense as the government restricts the types of online content that users can access, particularly content that strays from the official narrative. Rwanda and Uganda which appear in 2019, RURA blocked several Uganda news sites such as the New Vision, the Daily Monitor, The Nile Post, Chimp Reports, and the Independent are still inaccessible in country. Above all, the sense of self-censorship, the fear of stepping over an invisible line and being punished by the authorities is so entrenched in the spirit of many Rwandan journalists and remains a major obstacle to access to information in Rwanda.

**PRIVACY AND SURVEILLANCE**

The Constitution reaffirms respect for privacy as article 23 of the Constitution states that every person has the right to privacy, which includes the right not to have information relating to their family unnecessarily acquired or revealed. Before the law's enactment, there was no legislation in Rwanda to give effect to the right to privacy enshrined in article 23 of the Constitution. On October 13, 2021, the Cabinet enacted Rwanda's first data protection legislation, Law No. 058/2021 of October 13, 2021 relating to protecting personal data and privacy. Additionally, the law is modelled after the General Data Protection Regulation (GDPR) and may be jeopardised during the processing of personal data by both public and private bodies. The law applies to both manual and electronic processing of personal data. It also applies to data handlers and processors residing inside or outside of the republic of Rwanda.

While the Constitution and the laws provide for the right to privacy, the practice is quite different as the government interferes with or poses restrictions to this right. There have been allegations of snooping and phone tapping of political leaders and activists affiliated with the opposition by the national intelligence security services (NISS). The NISS also conducts surveillance on some international and domestic NGOs, through infiltrated agents to gather information about their operations, influence leadership decisions or create internal decisions. In addition to using informants to infiltrate civil society, the authorities have reportedly been using electronic surveillance to keep a watchful eye on citizens.

**EXISTENCE AND FUNCTIONING OF DATA PROTECTION SUPERVISORY AUTHORITY**

Article 27 of law no 058/2021 relating to the protection of personal data and privacy provides for a supervisory authority with the power:

- to monitor compliance and sanction data protection law violations,
- to create further regulations for implementation to receive complaints and claims relating to the processing of personal data of citizens to authorise processing operations that involve a high risk to rights and freedoms of individuals.

However, the law doesn't make elaborate provisions about the organisation and the operational structure of the supervisory authority. Nevertheless, in October 2021, the Ministry of Information Communication and Innovation announced and designated the National Cyber Security Authority (NCSA) as the supervisory authority in charge of the enforcement of the law. More recently, on March 31st, 2022 the Government of Rwanda through the NCSA officially launched the data protection supervisory office, a welcome implementation move towards effective personal data governance.

It is uncertain whether the data protection supervisory authority will execute its mission.
independently and without yielding to external pressure as the law does not specify who will head the institution, and how the staff members of the data protection supervisory authority will be appointed. However, in the absence of public policy or guidance regulating the modalities of the appointment of the head of data protection supervisory authority and his tenure of office with respect to the independence of this institution, therefore it is unclear how this will work in practice. So far there has been no data protection case litigation or petition initiated under the provisions of article 23 of the constitution protecting privacy before domestic jurisdictions in Rwanda. However, it is important to mention a series of ongoing litigation cases pending before the High Court of the United Kingdom and their future impacts on the Rwandan data protection law.

**REVIEW OF THE UNIVERSAL SERVICE FUND**

The Rwandan government has created a competitive ICT sector, and a key strategy document driving high-speed communications in the country, the 2013 national broadband policy.\(^{25}\) The policy aimed to transform Rwanda into an information society driven by universal access to high-speed, reliable, affordable and secure broadband infrastructure and services by 2024\(^{26}\).

The Rwandan telecommunications market is occupied by four major players Airtel Rwanda, Liquid telecom, MTN Rwanda, and Broadband Systems Corporation; they offer fixed or landline telephone, mobile telephone (mainly mobile calling and SMS), and internet data. The market is regulated by the Rwanda Utilities Regulatory Authority (RURA), which is the state agency responsible for oversight countrywide. The universal access fund was established through a presidential order\(^{27}\) and since then it is used to finance infrastructure deployment for schools and rural areas. The Rwanda universal access fund is funded by an annual contribution by the telecommunications operators of 2% of their revenues, more especially from the revenues of the interconnection fee levied from all the licensed operators. These revenues have been used to provide funding for schools to connect to fiber optic cable and deployment of VSAT satellite terminals in rural areas where other connectivity options are non-existent.

The Rwanda universal access fund is moderately active as internet adoption in rural areas remains low. Internet penetration stands at only 26.3%\(^{28}\), while 85%\(^{29}\) of the population is using mobile phones, only 15% have access to smartphones, hindering digital penetration and access. Additionally, digital

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27 Presidential Order no 05/01/ of 15/03/2004 determining the functioning of the universal access fund and public operator's contributions available at [https://www.rura.rw/fileadmin/documents/docs/pl05.pdf](https://www.rura.rw/fileadmin/documents/docs/pl05.pdf) (accessed on 29 December, 2022)


literacy remains extremely low at only 10% challenging the ability to source a skilled local workforce. Among the achievements made by the Universal access fund is the Ms Geek Africa Program, a regional flagship competition run by “Girls in ICT Rwanda”, which aims to encourage girls to participate in the fields of Science, Technology, Engineering and Mathematics whose program is funded by the Rwandan Ministry of Innovation and ICT.

DEVELOPMENTS IN ICT AND EMERGING TECHNOLOGIES

The digitization journey which the government of Rwanda embarks on such as the modernization of the administration in an effort to improve service delivery and efficiency, has completely changed the way Rwandans interact with state’s institutions to get online services and this has sustainably contributed to the efficiency gains between government, the public and the private sector. Amongst the notable achievements made in order to bridge digital divide is the launched of “Irembo platform” a centralized portal which serves as a one stop shop for a number of government basic services.

Currently, Rwanda is aggressively introducing ICT devices in schools, where according to the latest figures of the ministry of Innovation and ICT 84% of schools countrywide have computers installed and utilized, 52% secondary schools are connected to the national broadband.

In 2019 in a national effort to increase internet penetration countrywide, the government of Rwanda partnered with the International Telecommunications Union (ITU) and UNICEF in order to strengthening school’s connection, especially those based in rural areas and at the same time providing community hotspots with free connectivity near the school’s premises.

ARTIFICIAL INTELLIGENCE (AI) NATIONAL STRATEGY

Although Rwanda has established itself as an ICT frontrunner in Africa. Nonetheless, the country has not yet developed a comprehensive policy on Artificial Intelligence. It was only in 2020 the Ministry of innovation and ICT embarked on a journey to develop the country's national AI policy. The Ministry of Innovation and ICT together with key stakeholders has defined six priority areas for an effective AI policy in Rwanda which is currently through the validation process. The Rwanda national Artificial Intelligence policy framework and implementation plan as it is denominated is focused on the ethical use of artificial intelligence to promote social and economic development. The national AI policy framework has identified priority sectors where AI adoption has a potential impact on the country such as agriculture, the education system, financial services, healthcare, energy and transportation. In addition, the policy advocates for the creation of open public sector data to reduce entry barriers.

Nonetheless, Rwanda has been moving ahead with the use of AI in the public domain in the sectors of public health, transport, and immigration. For instance, since 2016 Zipline drones have been operating in Rwanda delivering blood and medicines to remote health centres across the country. More recently in 2019, Rwanda's general directorate for immigration and emigration introduced the E-gates to FastTrack immigration formalities at the major entry points of the country. The E-gates were

[31] https://www.girlsinict.rw/msgeekafrica
[32] https://irembo.gov.rw/home/citizen/all_services
[34] Rwanda ICT Sector Profile, Op cit
[36] How Rwanda AI Policy helps to shape the evolving AI ecosystem available at https://www.digicenter.rw (accessed on 17/12/2022)
[37] Ibid.
deployed at the Kigali International Airport. Rwanda's Artificial Intelligence ecosystem is growing as it aspires to position itself as Africa's AI lab. However, this dynamic creates the need to define ethical standards for the use of Artificial intelligence, while mitigating the risks and ethical concerns that the technology entails. Unfortunately, during the course of developing the country's national policy, there was no adequate public consultation, as only the key stakeholders were consulted, and the general public were kept out of the process.

Besides that, the future of AI in Rwanda looks very promising as the country has succeeded in attracting world-class universities such as the Carnegie-Mellon University –Africa and the African Institute of Mathematical Studies which have their campuses based in Kigali, and at the same time attracting a substantive number of regional and global talents positioning the country as the number one destination for Information Technology and Artificial Intelligence education. Additionally, the country has recently launched the Centre of the Fourth industrial revolution and rapid innovations (C4IR)\textsuperscript{38}

The Centre will focus on data governance, artificial intelligence and machine learning by spearheading government efforts through the shape of new policies and strategies in technology governance that enable agile implementation and to foster inclusive innovation in the country.

It is important to note this project resulted from the partnership between the government of Rwanda through the ministry of innovation and ICT and the world economic forum\textsuperscript{39}.

**GENDER AND ACCESS TO ICT**

As the country is steadily moving towards its vision of becoming an information and knowledge-based economy and the East African ICT hub, several initiatives have been put in place to create awareness for the needs of gender in the ICT ecosystem in Rwanda. Gender equality is enshrined in the constitution and includes establishing a specialised gender monitoring organ\textsuperscript{40}. Although Rwanda has strong foundations to make digital access affordable for all, a gendered division of labour and power relations in the Rwandan society seems to contribute to a lingering gender imbalance in internet access and its usage. There is a gender disparity among people in the ICT, males represent a large proportion compared to females. Despite the fluctuation, the proportion of males employed in the ICT sector has been consistently higher than that of females\textsuperscript{41}.

The major barrier to Internet access is the cost which is still very high for many in sub-Saharan Africa. Rwanda is not an exception as one gigabyte of mobile internet costs 1100 Rwandan francs 1100 (around US$1.10)\textsuperscript{42} in a country where the median net hourly wage is 450 Rwandan francs. Rwandan women have no easy access to digital technologies. To access the internet, someone needs a computer or a smartphone. However, these are still very expensive devices. Computer ownership is very low in general and more so for women, only 2\% of the Rwandan population use computers on a daily basis and only 1.8\% of women make use of computers daily\textsuperscript{43}. The ownership of mobile phones among men in Rwanda (60.4\%) is almost double that of women (37.2\%) with a gender gap of about 62\%, the largest among the 10 African countries surveyed\textsuperscript{44}. However, it is important to mention that several initiatives have been put in place to create awareness and
fill the gender gap in the ICT sector including the following:

**Girls in ICT Rwanda:** This is a forum of women working in the field of ICTs whose main goal is to improve the current statistics regarding women in the ICT sector as well as to alter the stereotype held by many young girls that ICT's is a man's job.

**Camp tech Kobwa:** A newly founded program, with the main purpose to provide young women with unhindered access to computers to develop skills and creativity. The camp encourages young women to become active citizens by building their self-esteem and confidence, and by empowering them to start computer and media clubs with their ICT teachers upon returning to school.

**Smart girl:** Smart girl seeks to increase the awareness, knowledge and confidence of girls in rural areas with little exposure to.

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46 [https://www.egr.msu.edu/techkobwa/home](https://www.egr.msu.edu/techkobwa/home)
Conclusion and Recommendations

Despite the liberal and progressive digital policies, there is room for development and reforms. Social media networks and digital communications channels have become critical sites for political and social activity with a need for an open environment for digital rights to thrive. This assessment necessitates the following recommendations.

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<td>• The Rwandan government has the duty to facilitate a conducive environment for the free flow of information in the country, by upholding the independence of the Media regulatory authority as well as by restraining its interference into the work of the Rwanda Media High Council</td>
<td>• Internet Service Providers and Telecommunications companies should be transparent and need to publish the quantity of the state security services surveillance requests and types of devices and tools being used in monitoring citizens to advance transparency and public confidence.</td>
<td>• The Rwandan Civil society organisations must coordinate their actions to create awareness and the monitoring of the violations of human rights both online and offline in the country.</td>
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<td>• There is a critical need of repealing some articles of the penal code specifically the provisions of articles Articles 156, 157, 194, 218 and 251 of the penal code as well as reviewing the past convictions of journalists and bloggers that have been convicted on vague charges such as “inciting public disorder or spreading rumours to cause unrest among the population “, “disposing of or degrading evidence or information relating to genocide” and “publication of</td>
<td>• There is a need for ISPs and Telco’s to tackle the key issue of gender digital divide through a more conscious corporate social responsibility policy aimed at increasing broadband access for marginalised groups..</td>
<td>• There is a need to streamline the flow of information between the different community grassroots organisations and NGOs to build effective domestic human rights monitoring mechanisms, building capacity for the detection, investigation and policy advocacy against Human rights violations.</td>
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<td>• The private sector should demonstrate their commitment to universal access to the internet by promoting initiatives aimed at the creation of internet facilities to expand connectivity countrywide.</td>
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<td>• Holding the Rwandan state accountable through regular meetings and consultations regarding Legal loopholes and policy shortcomings regarding the promotion of Human</td>
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<td>• To promote greater access to the internet, the government should boost allocations for the ICT sector in order to expand access to the Internet particularly in rural areas.</td>
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<td>• There is a need for wide and open public consultation especially regarding the adoption and the implementation of the Rwanda national AI strategy in order to allow all the different stakeholders to share their views and concerns, more importantly to ensure public transparency and accountability of all the policy and decision makers as far as the implementation of the AI national strategy is concerned.</td>
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