

GLOBAL INFORMATION SOCIETY WATCH 2026

**Free/libre and open source software:
Visions of openness from the Global South**



ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS (APC)
AND SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY (SIDA)

Global Information Society Watch 2026 SPECIAL EDITION

Free/libre and open source software: Visions of openness from the Global South

Operational team

Valeria Betancourt (APC)
Alan Finlay (APC)
Maja Romano (APC)

Project coordination team

Igu absorty (APC)
Valeria Betancourt (APC)
Cathy Chen (APC)
Flavia Fascendini (APC)
Alan Finlay (APC)
Maja Kraljic (APC)
Shivi Lal (APC)
Lori Nordstrom (APC)
Maja Romano (APC)
hvale vale (APC)

Project coordinator

Maja Romano (APC)

Editor

Alan Finlay (APC)

Assistant editor

Lori Nordstrom (APC)

Proofreading

Laura Pérez Carrara

Publication production support

Cathy Chen (APC)

Graphic design

Monocromo

Cover illustration

Gustavo Nascimento

APC would like to thank the Swedish International Development Cooperation Agency (Sida), European Commission, NLNet Foundation and NGI Zero coalition for their support for this Global Information Society Watch 2026 special edition.



Published by APC
2026

Creative Commons Attribution 4.0 International (CC BY 4.0)
<https://creativecommons.org/licenses/by/4.0/>
Some rights reserved.

Global Information Society Watch 2026 Special Edition Web and e-book
ISBN 978-92-95113-91-6
APC-202607-APC-R-EN-DIGITAL-384

Disclaimer: The views expressed herein do not necessarily represent those of the Swedish International Development Cooperation Agency (Sida), European Commission, NLNet Foundation and NGIZero coalition partners, APC, or its members.

NGI Zero is made possible with financial support from the European Commission's Next Generation Internet programme, under the aegis of DG Communications Networks, Content and Technology. NGI Zero receives funding from the European Union's Horizon Europe research and innovation programme under grant agreements No 101069594, 101070519 and 101092990.

FLOSS, development and digital inclusion in countries of the Global Majority

Haitham Dahboor

Jordan Open Source Association (JOSA)

<https://josa.ngo> and <https://www.linkedin.com/in/haitham-d-57150218a>

Introduction

While the race for digital sovereignty and artificial intelligence (AI) market supremacy intensifies the battle for digital power between the United States (US), the European Union (EU) and China, countries of the Global Majority are still treated by big tech companies as periphery – as a backyard where they can store their data and build their data centres without them having any say in the matter.

Yet the push for digital sovereignty built on open source is growing stronger across Global Majority countries. Innovations such as large language models (LLMs) in Indigenous languages and locally developed AI systems are flourishing in Latin America,¹ Asia and across the African continent. These regions are not just passive recipients of Northern technology anymore; they are building their own alternatives, developing models² that actually serve their communities and languages rather than simply extracting their data and resources for systems built elsewhere.

The tension is there. While the US, EU and China fight over who controls the future of emerging technologies, they all act as if the Global Majority countries exist primarily as sources of raw materials for their hardware,³ cheap labour for data annotation,⁴

land for data centres,⁵ and markets for their products.⁶ But communities across these countries are rejecting this peripheral role and demanding actual inclusion and sovereignty,⁷ not just the right to host someone else's servers and use someone else's software.

Here we use the term Global Majority rather than “Global South” because the concept is not primarily geographic but demographic and political.⁸ The term refers to people of African, Asian, Latin American, Middle Eastern, Indigenous and mixed-heritage backgrounds, who together constitute roughly 80-85% of the world's population. It highlights the contrast between a global minority concentrated in powerful institutions, private corporations and big technology companies, and the majority of people in the world whose politics and experiences are often sidelined in global conversations and decision making, despite being the most affected by their outcomes.

It is important to note that while much of the discussion in this report focuses on countries of the Global Majority – primarily referring to developing countries which have been systematically excluded from international decision making and disproportionately affected by the concentration of digital power – the same dynamics apply to marginalised and disadvantaged communities living within developed countries. Communities of colour, Indigenous peoples and economically excluded groups in the Global North share many of the same experiences of digital exclusion, lack of representation in technology governance, and dependence on systems designed without them in mind. The term

1 Preve, C. (2026, 10 February). Chile launches open-source AI model designed for Latin America. *AP News*. <https://apnews.com/article/chile-latam-gpt-artificial-intelligence-spanish-a2d914ff6c06b230decf930760ccb44f>

2 Biyela, S., Rageh, A., & Rather, S. (2025, 21 May). As AI giants duel, the Global South builds its own brainpower. *Nature*. <https://www.nature.com/immersive/d44151-025-00085-3/index.html>

3 Amnesty International. (2016, 19 January). Exposed: Child labour behind smart phone and electric car batteries. <https://www.amnesty.org/en/latest/news/2016/01/child-labour-behind-smart-phone-and-electric-car-batteries/>

4 Perrigo, B. (2023, 18 January). Exclusive: OpenAI Used Kenyan Workers on Less Than \$2 Per Hour to Make ChatGPT Less Toxic. *Time*. <https://time.com/6247678/openai-chatgpt-kenya-workers/>

5 Global Data Center Hub. (2025, 7 November). The Rise of Emerging Markets in the Data Center Race. <https://www.globaldatacenterhub.com/p/the-rise-of-emerging-markets-in-the>

6 AEC Week. (2026, 27 January). How Data Centers Are Reshaping Africa's Power Market. <https://aecweek.com/how-data-centers-are-reshaping-africas-power-market/>

7 African Union. (2020). *Digital Transformation Strategy for Africa (2020-2030)*. https://au.int/sites/default/files/documents/38507-doc-DTS_for_Africa_2020-2030_English.pdf

8 Campbell-Stephens, R. M. (2021). *Educational Leadership and the Global Majority: Decolonising Narratives*. <https://books.google.fr/books?id=UYNSEAAQBAJ>

Global Majority encompasses these communities too, not by geography, but by their shared structural position of exclusion from the institutions and corporations that shape the digital world.

Free/libre and open source software (FLOSS) has enabled and accelerated access to critical services for the Global Majority in many developed and developing regions and countries. Among others, it has supported concrete advances in education systems,⁹ public administrations, and health services,¹⁰ providing adaptable and affordable digital infrastructure where proprietary solutions were inaccessible or imposed restrictive conditions.

This report offers a practical view of how FLOSS has contributed to development in Global Majority countries, in schools, in governments and in health systems. It also traces the early and ongoing tensions with corporate technology interests, and argues that these tensions are not simply a technical debate about software licensing, they are a political struggle over who controls the digital infrastructure of entire nations.

Why FLOSS matters politically in the Global Majority

The distinction between free software and open source software is not merely semantic. As the GNU Foundation¹¹ explains, “free” in FLOSS refers to freedom, not price: the freedom to use, study, modify and distribute software. This political dimension is what makes FLOSS particularly relevant to countries of the Global Majority, where dependence on proprietary software from foreign corporations is not just an economic burden, but a sovereignty problem.

Christopher May argued that FLOSS offers developing countries a way to comply with international intellectual property law under the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement, while simultaneously building local technical capacity without paying the licensing fees that drain public budgets.¹² This reframes FLOSS not as a cheap alternative to “real” software, but as a strategic tool for development and self-determination.

The mission of the state is to organise society for the freedom and well-being of its people. In

the computing field, this means encouraging the adoption of software that respects users’ freedom. In an institutional setting, a proprietary system restricts the freedom of the institution, and is, in that sense, a structural problem that states have a responsibility to address. This matters especially for governments: most public sector activities now depend on computing, and control over those activities depends on control over that computing. And losing that control, by locking public institutions into foreign proprietary systems, is not just a budget problem – it is a national security problem.

Beyond sovereignty, the economic argument is straightforward. The money that governments across the Global Majority pay in proprietary software licensing fees is money that does not go to schools, hospitals or infrastructure. Moving public institutions to free software saves money and, critically, redirects that money back into the local economy, by developing local software support businesses and a local technical workforce rather than subsidising the growth of already dominant foreign corporations.

The tension between FLOSS and corporate technology interests in Global Majority countries has been nowhere more visible than in schools. Education is the sector where the stakes are highest: whoever shapes the technology environment of schoolchildren shapes the next generation’s relationship with digital tools, and with the corporations that make them.

Across Africa, in the early 2000s, a network of civil society organisations called SchoolNet,¹³ with chapters in Namibia, South Africa and many other countries, was working to connect schools to the internet and equip them with computers. Faced with tight budgets and the high cost of proprietary software licences, many SchoolNet chapters turned to Linux. In Namibia, SchoolNet deployed Linux on hundreds of school computers, arguing that it was not just cheaper, but culturally and technically more appropriate: local developers could adapt it, schools could repair and modify it, and no annual licensing fee would drain the education budget.

But the corporate response was swift. Microsoft launched its “Partners in Learning” programme, offering deeply discounted licences to schools and governments in developing countries, a strategy that critics have described as market capture dressed up as philanthropy. The logic was clear: get governments and students dependent on Microsoft systems early, and the long-term licensing revenue would follow. SchoolNet South Africa found itself

9 <https://www.gnu.org/education/edu-why.html>

10 Karopka, T., Schmuhi, H., & Demski, H. (2014). Free/Libre Open Source Software in Health Care: A Review. *Healthcare Informatics Research*, 20(1), 11-22. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3950260/>; Living Open Source. (2024, 21 August). Impact of open source in the developing countries. <https://livingopensource.org/impact-of-open-source-in-countries>

11 <https://www.gnu.org/philosophy/floss-and-foss.en.html>

12 May, C. (2006). The FLOSS alternative: TRIPs, non-proprietary software and development. *Knowledge, Technology & Policy*, 18, 142-163. <https://link.springer.com/article/10.1007/s12130-006-1008-4>

13 <https://www.schoolnet.org.za/>

navigating a painful tension between its founding FLOSS principles and the institutional pressure to partner with Microsoft in order to access resources it desperately needed.

The Egyptian case illustrates the same dynamic from a different angle. When the Egyptian government agreed to spend USD 43.8 million¹⁴ to acquire Microsoft licences and software products to be used in education, and to be paid over four fiscal years, public anger erupted, not primarily because of the size of the sum, but because of what it represented. As Nagla Rizk, founding director of the Access to Knowledge for Development Center, put it: “[T]his contract does not only increase Microsoft’s presence in the Egyptian market, it reduces the chances for small local companies to compete, especially those relying on open source software.”¹⁵

The objections raised by Egyptian civil society at the time were not abstract. Critics argued that the government was paying enormous sums for limited rights – not ownership, not the freedom to modify, not the ability to use the software as it wished, but only the permission to use it on Microsoft’s terms, for as long as Microsoft allowed. The government was, in effect, providing free advertising for the company by making its products mandatory courses in schools. As one commentator argued: “[A]fter a revolution demanding freedom, the government had no right to deal with a company that does not respect user freedom.”¹⁶

There are, however, examples of the reverse happening, of governments and institutions breaking away from proprietary systems and choosing FLOSS. In South Africa, First National Bank announced plans to switch more than 12,000 desktop computers to Linux in 2007.¹⁷ In 2009, the South African Social Security Agency (SASSA) deployed Linux desktops across 50 rural sites,¹⁸ explicitly citing budget constraints and infrastructure limitations as the reason for choosing open source. These examples show that the move to FLOSS is possible, and that it happens not despite the constraints of the Global Majority, but because of them, with necessity driving an openness to alternatives that wealthier institutions rarely need to consider.

14 <https://www.facebook.com/photo.php?fbid=451943038187168>

15 <https://x.com/naglarzk/status/284423828300500992> (Author’s translation from Arabic.)

16 <https://ar.globalvoices.org/2013/01/26/28419> (Author’s translation from Arabic.)

17 Popa, R. (2007, 4 June). FNB shifts to Linux. *Softpedia News*. <https://news.softpedia.com/news/FNB-Shifts-to-Linux-56364.shtml>

18 Omni. (2009, 25 June). SASSA cuts costs and improves service delivery in rural areas with Novell and Useful Multiplier. <https://web.archive.org/web/20140203015224/http://www.omni-ts.com/newsroom/linux-desktops-government.html>

Case study – Jordan:

Open source as a policy commitment

Jordan offers one of the clearest examples in the Arab region of FLOSS being treated not as a workaround, but as a deliberate policy choice embedded in national digital strategy. The Jordan Open Source Association (JOSA),¹⁹ founded by digital rights advocates and technologists, has spent years campaigning to ensure that open source principles are written into Jordan’s Digital Transformation Strategy as binding commitments rather than merely aspirational language.

The clearest practical outcome of this work is the adoption of OpenEMIS,²⁰ an open source education management information system, by Jordan’s Ministry of Education. In 2016, the government officially adopted OpenEMIS²¹ as its core data platform, covering 7,400 public schools²² and more than two million users, including students, teachers, staff and administrators. The system provides accurate, timely and disaggregated data on school infrastructure, field directorates and educational outcomes.

This is significant for several reasons. First, the scale: a single open source platform now underpins the data infrastructure of an entire national education system. Second, the sovereignty dimension: Jordan owns and controls its own education data, rather than being dependent on a proprietary vendor for access to information about its own schools. Third, the cost dimension: resources that would have gone to licensing fees can be redirected to actual educational improvement.

Jordan’s FLOSS story also has a skills dimension. In 2024, OpenSSF and the Linux Foundation announced scholarships specifically for women in Jordan entering the cybersecurity field,²³ building on a growing community of open source practitioners in the country. In this way, FLOSS adoption in education and government creates demand for local technical skills, which in turn creates jobs and economic value

19 <http://josa.ngo>

20 OpenEMIS stands for Open Education Management Information System. <https://www.openemis.org>

21 United Nations Jordan. (2022, 6 June). Ministry of Education launches EMIS policy. <https://jordan.un.org/en/188018-ministry-education-launches-emis-policy>

22 Jordan Times. (2023, 23 February). Online education management system ‘OpenEMIS’ launched. <https://jordantimes.com/news/local/online-education-management-system-%E2%80%99Openemis%E2%80%99-launched>

23 OpenSSF. (2024, 4 March). OpenSSF and Linux Foundation Training & Certification and CNCF announce scholarships to support women in Jordan entering the cybersecurity field. <https://openssf.org/press-release/2024/03/04/openssf-and-linux-foundation-training-certification-announce-scholarships-to-support-women-in-jordan-entering-the-cybersecurity-field-in-collaboration-with-us-white-house/>

that stay in the country rather than flowing to a distant corporation's shareholders.

Jordan's experience also illustrates the fragility of these gains. Policy commitments to open source are only as durable as the political will behind them. When governments change or when corporate lobbying intensifies, as it always does when large contracts are at stake, the achievements of years of advocacy can be reversed quickly. The role of organisations like JOSA in holding governments accountable to their stated commitments is therefore not a one-time victory but an ongoing function.

Case study – South Africa: Digital sovereignty and the limits of progress

South Africa presents a more complex, and in some ways more cautionary picture. It is a country with a relatively developed digital infrastructure²⁴ by regional standards, a history of progressive FLOSS policy advocacy, and documented examples of successful open source deployment, yet one that has struggled to translate these into sustained structural change.

The early promise was real. South Africa's post-apartheid government showed genuine interest²⁵ in open source as a tool for democratising access to technology. The National Advisory Council on Innovation (NACI) produced a comprehensive report²⁶ making the case for FLOSS adoption across government and education, arguing that open source could help close the digital divide while reducing dependence on foreign proprietary vendors. SchoolNet South Africa,²⁷ in its early years, was a genuine grassroots effort to bring Linux-based computing to schools that could not afford proprietary alternatives.

But as digital rights researcher and analyst observations from the South African context make clear, digital transformation in South Africa has not been a sovereign project: it has been a market-driven one. Companies like Microsoft,²⁸ Amazon through its

Amazon Web Services,²⁹ and Huawei³⁰ have come to dominate the South African digital space,³¹ controlling data flows and storage in ways that raise serious questions about who actually controls the country's digital infrastructure. The question is sharp: is digital progress under technological dependence real progress, or is it simply a new form of domination?

The South African case also reveals a structural problem that affects the whole continent. Digital transformation has often been framed as a purely technical or economic matter while the deeper political question of who owns what in the digital world goes unasked. Smart city projects, for example, have been built on foreign platforms and foreign technologies, meaning that the infrastructure of the country's digital future is effectively rented rather than owned. This is not a coincidence. It is the result of procurement decisions, trade agreements and political choices that have consistently prioritised attracting foreign investment over building sovereign digital capacity.

The cybersecurity dimension makes this even more urgent. South Africa has experienced repeated significant data breaches³² and cyber incidents³³ in public institutions. Each one has revealed not just technical vulnerabilities, but structural ones: a reliance on foreign private security companies to protect sensitive national infrastructure, and a lack of national cybersecurity capacity that is directly linked to the absence of a culture of sovereign digital infrastructure. As one analysis of this situation puts it, digital sovereignty has become synonymous with national sovereignty, and countries that do not own their digital infrastructure find that their sovereignty is compromised regardless of their military or political power.

Yet South Africa also offers genuine examples of FLOSS success at scale, particularly in health. The District Health Information System 2 (DHIS2)³⁴ was born in South Africa as a post-apartheid response to

24 Kechiche, S. (2025, 18 September). Africa's Digital Divide: Insights from the Global Network Excellence Index. *Opensignal*. <https://insights.opensignal.com/2025/09/africas-digital-divide-insights-from-the-global-network-excellence-index/dt>

25 Pieters, M. (2008). *Open source software and government policy in South Africa*. Master's thesis, Stellenbosch University. <https://scholar.sun.ac.za/items/f6a02497-04c2-433d-9de6-7b3f56704aa5>

26 National Advisory Council on Innovation. (2002). *Open Software & Open Standards in South Africa: A critical issue for addressing the digital divide*. <https://nstiip.naci.org.za/knowledge-base/reports/292-open-software-open-standards-in-south-africa-a-critical-issue-for-addressing-the-digital-divide-2002-v1-2/viewdocument/292>

27 <https://www.schoolnet.org.za/about-us/today/>

28 Butler, G. (2025, 7 March). Microsoft to invest \$300m in cloud and AI infrastructure in South Africa. *Data Centre Dynamics*. <https://www.datacenterdynamics.com/en/news/microsoft-to-invest-300m-in-cloud-and-ai-infrastructure-in-south-africa/>

29 Amazon Web Services. (2023, 13 April). AWS investment in South Africa results in economic ripple effect. <https://aws.amazon.com/blogs/publicsector/aws-investment-south-africa-results-economic-ripple-effect/>

30 Jackson, A. (2024, 25 October). Huawei Cloud: A Boosted Presence in South African Tech. *Data Centre Magazine*. <https://datacentermagazine.com/hyperscale/how-huawei-clouds-growth-is-impacting-the-technology-market>

31 Shapshak, T. (2022, 20 July). South Africa is now a major hub for big tech's cloud datacenters. *Quartz*. <https://qz.com/africa/1576890/amazon-microsoft-huawei-building-south-africa-data-hubs>

32 <https://isite.co.za/data-breaches-south-africa/>

33 ADF Magazine. (2025, 11 February). South Africa faces increased cyberattacks against government agencies. <https://adf-magazine.com/2025/02/south-africa-faces-increased-cyberattacks-against-government-agencies/>

34 <https://dhis2.org/>

the country's fragmented health data infrastructure.³⁵ It is now deployed in more than 80 countries, with full national roll-outs in Ghana, Kenya, Nigeria, Rwanda, Tanzania, Uganda, Zambia and many others. Tanzania's local teams³⁶ meanwhile built a Scorecard App on top of DHIS2 that was subsequently adopted by Uganda and Malawi.³⁷

This is a South-to-South technology transfer story: a tool built by and for the Global Majority, spreading to other countries in the Global Majority, with local developer communities adapting it to local needs. This is the opposite of top-down technology imposition.

Corporate pushback: The ongoing struggle

Grassroots organising against a corporation as large as Microsoft is never easy. The company has the advertising budget to claim that it “loves Linux”³⁸ while simultaneously using its money and political influence to capture governments and school systems across Global Majority countries. The announcement of a USD 50 billion AI investment push³⁹ targeting countries of the Global Majority in 2025 follows a familiar pattern: present the corporation as a development partner, offer subsidised access to build dependency, and secure long-term market dominance.

The Turkish government's response to this pattern – creating its own Linux distribution, called Pardus,⁴⁰ developed by the National Research Institute of Electronics and Cryptology (UEKAE) in 2003 and officially released in 2005 – shows that sovereignty-driven alternatives are possible. Brazil under Luiz Inácio Lula da Silva's government between 2003 and 2011 took an even more ambitious approach,⁴¹ mandating open source

software across all federal agencies,⁴² saving hundreds of millions of dollars in licensing fees, and using those savings to invest in building a domestic software industry. The French Parliament, the White House, the US Department of Defense, Germany's Munich city government, Spain, Cuba, the Czech Republic and Iceland have all made significant moves to open source at various points, proof that this is not a developing country niche but a global political choice.⁴³

But Brazil's FLOSS progress⁴⁴ was significantly reversed after political changes, showing the vulnerability of software policy (like all policy) to political will and corporate lobbying – and how change is not just about winning individual policy battles, but building the civil society advocacy infrastructure to sustain those gains.

Where we are now: Digital colonialism and the road ahead

Digital sovereignty⁴⁵ has become, in many ways, synonymous with national sovereignty. Countries that do not control their own digital infrastructure, their software, their data, their communication systems, find that their political and economic sovereignty is compromised, regardless of formal independence. Structural dependence on technologies designed, owned and controlled elsewhere therefore directly impacts the economic and political condition of a country.

The stakes are higher than they have ever been. As AI systems become central to decision making in healthcare, education, law enforcement and public services, the question of who controls those systems becomes a question of who controls life outcomes for hundreds of millions of people. Countries of the Global Majority cannot afford to passively accept AI systems built on data extracted from their communities, trained to serve users in the Global North, and sold back to them at prices that drain public budgets.

FLOSS is not a silver bullet, and it has its limits; some, such as the fragility of policy commitments when political winds shift, have been discussed in this report. Despite the successful roll-out of FLOSS projects developed for the Global Majority, developing countries have FLOSS skills capacity

³⁵ <https://dhis2.org/hisp-history/>

³⁶ DHIS2. (2026, 5 January). Unlocking insights and driving action in Tanzania with DHIS2 scorecards. <https://dhis2.org/tanzania-scorecard-app/>

³⁷ Sukums, F., Simba, D., Kumali, C., Asimwe, S., Pothepragada, S., & Githendu, P. (2021). Avoiding pitfalls: Key insights and lessons learnt from customizing and rolling out a national web-based system in Tanzania. *The Electronic Journal of Information Systems in Developing Countries*, 87(6). <https://doi.org/10.1002/isd2.12193>

³⁸ Microsoft. (2015, 6 May). Microsoft Loves Linux. <https://www.microsoft.com/en-us/windows-server/blog/2015/05/06/microsoft-loves-linux/>

³⁹ Smith, B., & Crampton, N. (2026, 17 February). We need to act with urgency to address the growing AI divide. *Microsoft*. <https://blogs.microsoft.com/on-the-issues/2026/02/17/acting-with-urgency-to-address-the-growing-ai-divide/>

⁴⁰ <https://pardus.org.tr/en/pardus-history/>

⁴¹ Shaw, A. (2011). Insurgent Expertise: The Politics of Free/Libre and Open Source Software in Brazil. *Journal of Information Technology & Politics*, 8(3), 253-272. <https://doi.org/10.1080/19331681.2011.592063>

⁴² Paiva, E. (2009). Use of Open Source Software by the Brazilian Government. *Technology Innovation Management Review*, May. <https://timreview.ca/article/250>

⁴³ https://en.wikipedia.org/wiki/List_of_Linux_adopters

⁴⁴ Oram, A. (2016, 28 October). Open source in Brazil. *O'Reilly*. <https://www.oreilly.com/content/open-source-in-brazil/>

⁴⁵ Pohle, J., & Thiel, T. (2020). Digital sovereignty. *Internet Policy Review*, 9(4). <https://doi.org/10.14763/2020.4.1532>

constraints and face the difficulty of sustaining community-driven projects without stable funding. There is also a real risk that open source tools developed in the Global North are still designed with Northern contexts in mind and require significant local adaptation to serve Southern communities well.

But the examples in this report show what is possible. A medical records system (OpenMRS)⁴⁶ built in Kenya in 2004 now serves over a million patients across 60 countries. A health data platform born in post-apartheid South Africa has become the backbone of public health infrastructure across sub-Saharan Africa. Jordan's Ministry of Education now manages data for 7,400 schools through an open source platform it controls. It is worth noting that OpenMRS and DHIS2 serve distinct but

complementary purposes: OpenMRS operates as an electronic medical records system at the point of care, while DHIS2 functions at the national level for health data aggregation and reporting. Many countries deploy both as part of an integrated open source health infrastructure. Meanwhile, Arabisation – the adaptation of software to the Arabic language and its specific needs – has been a recurring challenge across the Arab world, with FLOSS sometimes offering the only path to locally appropriate software precisely because proprietary vendors did not find the market sufficiently profitable to serve. These are not marginal achievements. They are proof that the Global Majority can build, adapt and own its own digital tools, and that FLOSS is one of the most powerful frameworks available for doing so.

Other outstanding FLOSS examples from Global Majority countries

Ushahidi (Kenya): Born in the aftermath of Kenya's disputed 2007 election, when four Nairobi technologists built a crowdsourced crisis mapping platform in days, Ushahidi has since been deployed over 125,000 times in more than 160 countries. It has been used to monitor elections in Nigeria and Kenya, map needs after the Haiti earthquake and document violence in Syria and Congo. In Egypt, HarassMap, a platform developed using Ushahidi that allows women to anonymously report sexual harassment, has inspired similar initiatives in more than 25 countries. <https://www.ushahidi.com/>

Sahana (Sri Lanka/Asia/Latin America): Created by Sri Lankan technologists in the immediate aftermath of the 2004 Indian Ocean tsunami to coordinate disaster relief, Sahana was officially deployed by the Sri Lankan government and has since been used in over 30 countries during disasters. These include the 2005 Pakistan earthquake, the 2006 Jogjakarta earthquake in Indonesia, the 2010 Haiti earthquake, and floods across the Philippines and Bangladesh. <https://sahanafoundation.org/>

RapidPro (Rwanda/Africa): Built on the experience of Nyaruka, a Rwandan software firm, and open sourced in partnership with UNICEF in 2014, RapidPro enables governments and NGOs to design interactive mobile messaging services – without a single line of code – using SMS, WhatsApp and voice. It now operates in over 50 countries and powers UNICEF's U-Report youth engagement platform, health surveillance systems in 18 countries, and citizen feedback programmes including one in Somalia where over 8,000 people submitted responses via SMS. <https://rapidpro.io/>

Nuha (Middle East and North Africa): Developed by technologists in Jordan, Nuha is an open source AI-enabled classifier designed to detect and analyse online gender-based hate speech across multiple Arabic dialects, including Egyptian, Jordanian, Iraqi, Tunisian and Central Kurdish. Nuha contributes to safer digital spaces and strengthens locally grounded technological responses to online harms. Its open source model enables researchers, civil society organisations and developers to adapt and improve the tool for regional contexts, supporting digital inclusion and rights-based technology development for the Global Majority. <https://github.com/jordanopensource/nuha-web>

⁴⁶ <https://openmrs.org/>

The early tensions described in this report, between SchoolNet Africa and Microsoft, between Egyptian civil society and a government spending USD 43 million on proprietary licences, between Brazil's open source mandate and corporate resistance, were not historical footnotes. They were the first rounds of a struggle that is still ongoing and whose stakes have only grown. Understanding those early battles is essential to understanding where the Global Majority stands today: still fighting, still building alternatives, and more aware than ever that digital freedom is not a technical preference but a political demand.

And that frontier is now expanding into AI. The same dynamics that drove communities in Global Majority countries to build and defend open source alternatives to proprietary software are now driving a new generation of innovators to develop AI tools in and for their own contexts. Journalists and technologists in Zimbabwe and Malawi, for example, are already confronting the question of whether AI will preserve or accelerate the extinction of low-resource African languages. Zenzele Ndebele, working through his organisation the Centre for Innovation and Technology (CITE) in Zimbabwe, is pioneering AI development for underserved African languages, starting with Ndebele, and building AI avatars and tools where large technology companies have not. In Malawi, Mallick Mnela is experimenting with AI in media, driven by the urgent question of whether tools like Chichewa-language AI can be built and sustained before it and other African languages are consigned

to “digital irrelevance”.⁴⁷ These are not marginal experiments. They are the newest expression of the same political demand: that the Global Majority should not only consume the technologies of the future, but shape, own and control them.

The early experiences described in this report point to a number of lessons that remain relevant today. First, civil society advocacy is indispensable: the gains made in Jordan, South Africa, Egypt and elsewhere did not happen by accident but because organised groups of practitioners, lawyers, educators and technologists pushed consistently for FLOSS to be embedded in policy. Second, policy wins alone are insufficient, they must be backed by the civil society infrastructure that can monitor, defend and renew those commitments when political winds shift or corporate lobbying intensifies. Third, local technical capacity is the foundation of sustainable sovereignty: without local developers, trainers and support communities, even well-intentioned open source deployments become dependent on distant expertise. Fourth, South-to-South knowledge sharing, illustrated by DHIS2 spreading from South Africa across sub-Saharan Africa, or the SchoolNet network connecting practitioners across the continent, is one of the most powerful and underused mechanisms available. And lastly, the struggle is never over: every generation of technology, from personal computing to cloud infrastructure to AI, resets the contest between concentrated corporate power and sovereign digital alternatives, requiring renewed engagement from each new generation of advocates.

⁴⁷ McNally, P. (2025). The Space of Hope Where Journalists Need to Live. In A. Finlay (Ed.), *State of the Newsroom 2025: AI, Trust and Resilience*. Wits Centre for Journalism. <https://journalism.co.za/state-of-the-newsroom-2025-ai-trust-and-resilience-building-a-future-news-in-south-africa/>

FREE/LIBRE AND OPEN SOURCE SOFTWARE: VISIONS OF OPENNESS FROM THE GLOBAL SOUTH

This special edition of Global Information Society Watch offers powerful arguments for the decolonisation of free/libre and open source software (FLOSS). The nine thematic reports published here analyse structural exclusions in the FLOSS community, detail what the FLOSS movement can learn from feminism, map FLOSS advocacy in the Global South, and suggest practical ways that FLOSS projects can be more inclusive. They argue that the FLOSS movement needs to be revitalised through a stronger identification with marginalised communities in the Global South.

GLOBAL INFORMATION SOCIETY WATCH
2026 Report
www.GISWatch.org

