

Foreign Policy Engagement with African Artificial Intelligence

Introduction

Many states have released national AI strategies that lay out their AI plans in industry, society, and research. Europe and many individual Member States have recognized the importance of focusing not only on domestic AI capabilities, but also alliance-building and cooperation with like-minded states when it comes to their AI aspirations. Although international cooperation is a European priority, knowledge about the African AI landscape is scarce and underdeveloped in the European foreign policy community.

Though engaging with the African AI landscape is not necessarily a European priority, other key players like the United States and China are both active on the continent, competing for influence and access to new markets. The different ways in which the US and China are active in Africa have important implications for European, and, specifically German foreign policy. However, there is a reason why Africa is not yet a core part of the European AI discussion: information is simply hard to find. Only one country, Kenya, has an official national strategy, and only two others have announced forthcoming documents, but anything concrete is yet to come. What is more, it is difficult to find news outlets that discuss AI policy, especially limited to English sources. The discussion on AI in Africa has thus far

been mostly covered by Western media (Technology Review from MIT, BBC, and Tech Crunch to name a few), which makes it hard to gauge the societal debate around AI on the ground. The academic community of Africa has also received less recognition worldwide, due to fewer events in Africa and the restricted access researchers have to visas to travel to conferences, though this is slowly changing. If the European AI community does not understand what drives the African AI discourse, then it will be exceedingly difficult to effectively engage.

African AI and Sustainable Development

The limited information on the African AI landscape that is available highlights some interesting trends. African use cases focus predominantly on sustainable development. Most startups that leverage AI solutions focus on areas like agriculture, access to healthcare, finance, public services, etc. These AI use cases fill important niches in society, namely for sustainable development. Alliance4AI (a consortium of startups, researchers, and organizations working on or with AI) profiled over a hundred AI startups across the continent and found that entrepreneurs are using AI tools to address challenges like agriculture (early disease detection in crops, geospatial analytics, knowledge sharing, optimizing resource allocation for improved yields, etc.); healthcare

(diagnosis by mobile apps, access to care for rural patients, etc.); *public services* (access to services for citizens through e-gov solutions, optimized resource allocation, reduced bureaucracy, etc.); and financial services (mobile banking, increased access to banking for rural populations or otherwise marginalized groups, etc.). Because players like the African Union, and UNESCO are starting to move into the AI space (especially focusing on AI that supports ethical and diverse principles), it is understandable why agendas focusing on development work clearly come to the forefront of the African AI landscape: the UN's Sustainable Development Goals (SDGs) are very often mentioned when discussing AI innovation in Africa, or even digitization in general. Considering SDGs such as No Poverty; Zero Hunger; Good Health and Well-being; Responsible Consumption and Production; Sustainable Cities and Communities, and more, it is clear why the majority of AI startups in Africa focus on advancing AI solutions to be means to these ends.

African AI startups are not the only actors seeking to fill these niches. Development organizations - including heavy investment from BMZ in Germany – have started to foster cooperation to develop solutions in this space too. One such initiative is the German Development Cooperation initiative, "FAIR Forward - Artificial Intelligence for All" with 5 partner countries: Ghana, Rwanda, South Africa, Uganda, and India. In this initiative (which appears to be one of few on the continent at this scale), central goals include: strengthening local technical know-how on AI; improving access to training data and AI technologies for local innovation; and developing policy frameworks for ethical AI, data protection and privacy.

Presence of US and Chinese AI Companies

Governmental or development organizations are not the only international actors present in the African AI landscape. One feature of American or Chinese AI which makes both countries powerhouses in Al innovation is that American and Chinese technologies are rapidly exported and proliferated into foreign markets. While there is certainly foreign influence in African AI, some of this influence has sought to promote indigenous technical solutions, and some has sought to simply export technologies into new markets. Take, for example, IBM or Google; both tech companies have focused on building up local, niche use-cases to invest into and develop African capabilities and leverage African know-how, rather than just exporting products. IBM opened the first industrial AI research lab on the continent (now has facilities in Kenya and South Africa), and develops solutions in areas like water, agriculture, transportation, healthcare, financial inclusion, and more. Google followed suit and opened an AI lab in Ghana to build products that focus on health and agriculture solutions, which hopes to attract ML researchers and engineers from around the continent. Now, in Nairobi, Johannesburg, Accra and Addis Ababa, there are AI research centers popping up in cooperation with major (Western) tech companies and local universities. One example of this Pan-African phenomenon is the African Master's in Machine Intelligence (AMMI), which is a fully-funded graduate program sponsored by Facebook and Google. AMMI is part of the African Institute for Mathematical Sciences and has locations at different centers of excellence for post-grad training across the continent.

In stark contrast to the Western private sector's investment into local African know-how and collaborative research labs stands the

Chinese private sector's activity in Africa. While African countries have been slow to adopt AI technologies, Chinese companies are offering loans for governments to buy their technologies and offering to set up and maintain these AI technologies, such as video infrastructure for AI-powered traffic surveillance, facial recognition software, and helping build African databases for speech recognition. Though, in theory, this may be interpreted as development work, in practice it should be scrutinized by other states, especially in Europe. Activists and governments from Africa and abroad warn that the penetration of Chinese AI solutions into Africa enables information censorship, surveillance, Internet shutdowns, and the violation of a wide range of digital rights of citizens. If Europe or German foreign policy seeks international cooperation on AI, then the tools developed and deployed must necessarily align with European norms and values. Any Member States who desire a European AI initiative must recognize that China is exporting not only AI solutions, but also exporting norms anchored by these technologies.

Conclusion

European cooperation with the African AI landscape should, therefore, be informed by local needs. It is important that technologies are not simply copied from other regions of the world and pasted into the African context. Research collaborations with local experts must be ramped up. Some universities, mainly in the tech hubs previously mentioned, have started to offer computer sciences and ML degrees at a larger scale, but these places could be seen as lighthouses for European actors to either invest public or private funds, or to enter into research partnerships. The solutions developed should be much more tailored to African needs. Not simply use cases from the American, European, or Chinese context, but rather tools developed by African researchers with African contexts in mind. Investing in this local expertise to further support a foundation of AI in Africa opens the doors for future cooperation with Europe. Moreover, investment in AI that aligns with the SDGs and any UN agenda would also be strategic for Europe, as these technologies would align more closely with the norms and values Europe wants to push at a global scale.

The European foreign policy community needs to strategically engage with Africa when it comes to AI. This requires an understanding of the local AI ecosystem and an analysis of Chinese and American approaches with which the EU will have to compete. European policy, driven by the German foreign policy community, which has traditionally been active in the development scene, should strive for an SDG-driven, European AI initiative for and with Africa. Connections or relationships that currently exist, especially among civil society or government actors, can easily be leveraged to engage more on AI. These networks could help solve the lack of available information and help illuminate the African AI landscape to European foreign policy makers. Working together with local know-how, investing into them, and learning from them shows that Europe understands local problems and takes the indigenous ecosystem seriously. This mutual innovation will advance Europe significantly by strategically engaging with an upcoming force to be reckoned with in terms of producing AI that aligns with European values founded in SDGs and promoting human and fundamental rights.

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