A BRICS Public AI Strategy for Innovation Promotion and Cooperation

Author: Krish Chetty, Senior Research Manager, Human Sciences Research Council

Opening

Thank you, Chair. Good morning, Colleagues. My name is Krish Chetty. It's my privilege to speak to you today and participate in this esteemed forum. I am a senior research manager from South Africa, where I am studying how AI can be a tool to solve social challenges affecting the Global South, including the BRICS. We are developing a chatbot for you to talk to my organisation's research outputs and write several papers about how we should apply AI.

Today, I want to talk about our need for an AI strategy in BRICS, specifically, to drive scientific and educational cooperation. In BRICS circles, you often hear about the need for Collaboration ePlatform to drive BRICS cooperation. Well this presentation describes a strategy to launch that platform.

My recommendations

So what am I recommending?

I propose that we define a transformative strategy for using public AI across the BRICS nations. This strategy should enhance scientific and educational cooperation, effectively leveraging our collective strengths through a jointly owned <u>public</u> AI system to foster innovation and drive economic growth. Public being the key word.

Here – AI tech is the foundation for Innovation and Cooperation. Firstly, we need to invest in AI infrastructure in the form of physical data centres –

Second, innovation depends on data, so we must establish a data-sharing platform to share our knowledge and the IP that we are comfortable in sharing with our BRICS family.

Thirdly, this IP can then be shared across the Innovation pipelines across our countries using a public shared BRICS Large Language Model – the final instrument of scientific cooperation.

To put this into practice, I propose that an appropriate BRICS institution is tasked to drive cooperation and work towards promoting digitisation, industrialisation, innovation, inclusiveness, and investment in our countries. Essentially, these tools can help us build connections between academia and industry.

Crucially, I believe that collaboration and knowledge exchange are the solutions to ensure that all countries make progress together so that some are not left behind.

AI Strategy Needed to Connect Stakeholders across the Innovation Pipeline

So, the heart of my argument is that Innovation and Cooperation requires us to firstly understand who participates in the innovation pipelines. Once we know who they are, we need to find practical methods to bring them together.

Firstly, In the BRICS Space, innovation requires cooperation, and cooperation requires an element of **diplomacy**. Thus, we need staff from Foreign Affairs involved in this pipeline

Then in terms of innovation promotion and cooperation, we need government involvement from our Science and Innovation departments, and we need to connect our universities and TVETs. We also need to facilitate opportunities for staff and students to engage with their counterparts in BRICS.

With greater interaction, we are then creating opportunities to develop new ideas to solve our problems. Their ideas need to be incubated, so they can be transformed into sustainable business models, requiring the inclusion of our incubators, accelerators and business development service providers.

Last, we need to think about commercialising those businesses, and we need to think about how we bring new products and services to the market. This involves engaging with Industry partners and distribution networks involved in the Supply Chain sector.

Opportunities

So why AI and why now?

Firstly, AI is perhaps our best tool to drive knowledge exchange. And this has only become apparent in the last 2 years.

We are seeing increasingly more sophisticated AI models get created, and many are made freely available in Open Source form.

Second, the Chinese National System of Innovation offers many best practices which can guide the BRICS on how to share data, and how to ensure exchanges between academia, innovators and business. We must learn from their experience.

Their data sharing model provides a pool of common data, allowing innovators to test out new business ideas. I expect a similar model shared by BRICS countries. will add tremendous value.

Next, the India Stack series of financial applications, demonstrates the strength of leveraging an open source community of software developers, and adapting and steering their work to offer accessible and affordable digital infrastructure.

Lastly, there is a wealth of untapped research artefacts we have yet to commercialise into products or services. If we integrate this knowledge into an AI model, the knowledge becomes usable and is a source of ideas for future innovation.

Shared Public BRICS AI Data Centres

Then I move to infrastructure.

The foundation of this strategy requires investments in physical infrastructure such as Data Centres across BRICS countries.

Here one could adopt a hub and spoke model, with member countries sharing access to a distributed collection of data centres.

Hosting our own public data centres enables the BRICS not to be dependent on Proprietary AI, which is especially important when you realise that such systems can be an engine for our economic growth.

Private companies, like Google, Microsoft and Meta are currently investing 100s of billions of dollars into this infrastructure, recognising this opportunity.

There's a need for the BRICS to also embrace this opportunity and collectively pool our resources to provide us the best opportunity to leverage this technology, and compete with the advances from the West.

This data centre can be populated with data from BRICS countries linked to the innovation pipeline.

As a public centre, government investment in the infrastructure will offer affordable access to AI services. Already, we have seen that premium private AI models are quite expensive, making access difficult for emerging innovators.

Thus, a people-first approach will help accelerate innovation.

BRICS Data Sharing Platform

Next,

After investing in the Data Centres needed to house a shared BRICS Data Sharing Platform, the BRICS need to adopt a data sharing policy. This policy will allow us to activate the shared potential of our collective data.

Each stakeholder in the innovation pipeline will need to make a choice of who they share they data with. This is **an Opt-in Model**. We will need a system that allows us to control who has access to our data and IP. You decide if you want to share a document with your team, your institution, your country, your industry, and the wider BRICS family.

It is this data that will drive discovery and innovation, but it needs to be accessible to all in the innovation pipeline.

From their vantage point, each stakeholder has a different perspective to understanding a problem. The Diplomat sees the world differently to a Supply Chain expert.

Importantly, we must avoid data silos – any hoarding of data will strangle cooperation and innovation.

Lastly, once implemented, such a platform will help bridge the academic and industry worlds, allowing us a better opportunity to commercialise and leverage our research.

BRICS Shared Large Language Model

The third piece of the strategy, allows you to extract value from the data, allowing you access to the underlying data platform.

By integrating this data into a shared BRICS Large Language model, members of the innovation pipeline have an opportunity to create new knowledge vertically, building upon the advances in a niche field. These language models are also great for horizontal knowledge expansion, where one can find methods to adapt a solution from one industry and apply it in a different industry all together. This is a strength of Large Language models, as it can easily see parallels in logic across niche fields, and help you connect the dots.

Thus, the Large Language Model provides a foundation for knowledge exploration, learning, sharing best practices and taking advantage of our vast stores of uncommercialised research.

Putting this into practice will require researching how to develop the model responsibly and determining the optimal governance model so all BRICS members control how it is managed – hence the need for a BRICS AI Strategy.

End Goal – Use Cases

So to conclude, we must remember that innovation is not limited to a single group of innovators, but needs cooperation.

Everyone involved in promoting cooperation and innovation has a unique perspective and can initiate new ideas.

The question is how does one translate a good idea into a viable business model that has value for all BRICS countries.

I'm arguing for us to establish a strong foundation for innovation, building upon the best practices from our countries.

If we establish this strong foundation, a shared large language model allows any innovator to explore new ideas, and identify who in the database they can work with.

Imagine a future where AI Agents could be established to manage a new project. They can pull together willing project partners and work towards setting up a joint project. Many good ideas also fail, if the innovator is not prompted to continue pushing the project forward. An AI project manager can do this. These AI services could manage cultural differences, communicate in relevant languages and establish a conducive environment for knowledge exchange.

Thank You

I understand that my idea is an ambitious one, but for us to introduce radical change which can promote development equitably across our BRICS family, we must be ambitious, to break the cycle of poverty we see in our countries.

As the first step, we need to build awareness of these opportunities and develop a strategy on how to apply these new technologies so we can accelerate how we connect people across the innovation pipeline.

We are capable and I believe this idea is a practical solution that we could start building today. If anybody wants to join me in building such a tool, please do reach out.

Thank you very much.

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