

Introduction to Thematic Issue: Collaborative Innovation in African Settings

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This *AJIC* Thematic Issue: Collaborative Innovation in African Settings features findings from research conducted by members of the Open African Innovation Research (Open AIR) network.¹ With researchers spread across more than 20 African countries, Canada, and elsewhere, Open AIR has for more than a decade been playing a leading role in exploring and uncovering the work of Africa's knowledge-based innovators.

The two overarching questions currently driving Open AIR's research are: How can open, collaborative innovation help businesses scale up and seize the new opportunities of a global knowledge economy? And which knowledge governance policies will best ensure that the social and economic benefits of innovation are shared inclusively? These questions are approached through research work organised into five (often overlapping) thematic orientations: technology hubs, informal innovation, Indigenous entrepreneurs, innovation metrics, and laws and policies. Open AIR's core research methods are situational analysis via case studies; action-based research; and grounded theory-building. The researchers come from a wide range of disciplines, including law, economics, management, political science, and public policy.

The six articles in this thematic issue reflect the diversity of the Open AIR network, of its approaches to understanding collaborative innovation in African settings, and of its conceptions of the social, economic, technological and policy dimensions that impact, and are impacted by, innovation. Also reflected in the articles is the geographical range of the network. Two of the articles include detailed reflections on international and African continental realities, and the four articles grounded primarily in African national and sub-national realities draw on data from the continent's North, East, and Southern regions. The articles' authors include researchers from five of Open AIR's institutional hubs: The American University in Cairo, Strathmore University in Nairobi, the University of Johannesburg, the University of Cape Town, and the University of Ottawa.

The opening article, by Gwagwa, Kraemer-Mbula, Rizk, Rutenberg and De Beer, explores one of the most pressing matters, in both practical and policy terms, facing African knowledge-based innovators: deployments of artificial intelligence (AI) on the continent. Framing their analysis in terms of socio-economic inclusion, the authors argue that if AI is to be of true benefit to the continent, African policymakers will need to craft enlightened responses to matters of gender empowerment, cultural and linguistic diversity, and shifts in labour markets.

1 <https://openair.africa>

The second article, by Oguamanam, interrogates a topic that is poised to take on growing urgency in African settings in the years to come: the quest for Indigenous data sovereignty. The focus of this sovereignty movement is on Indigenous peoples' right to control the collection and use of data that is drawn from their communities, so that these communities can exercise full self-determination and full control over their socio-economic development.

In the third article, Nzomo, Mwangi, Matu-Mureithi, Muchiri and Rutenberg provide findings from their survey of collaborative innovation dimensions present in the activities of Nairobi's numerous start-ups engaged in mobile tech innovation. They find that openness, networking, and informality are central elements of the start-ups' approaches to innovation.

Start-up dynamics are also central to the Abrahams article, which sets out findings on the patterns of innovation at three South African tech hubs, and among the start-ups hosted by the hubs. Abrahams puts particular focus on the degree to which the hubs and their hosted start-ups pursue scale through "entanglement" with exogenous and endogenous factors and external entities.

In the fifth article, ElHoussamy and Rizk provide an account of their research into how innovation unfolds at makerspaces in Egypt, Tunisia, and Morocco. They find a diversity of approaches and models emerging in the three countries, but with all the spaces characterised by vibrant approaches to knowledge-sharing, innovation, and scaling. The authors also identify elements of fragility in this relatively young movement, and suggest some features that are likely to be central to the spaces that achieve greatest sustainability.

The maker movement also features in the final article of this thematic issue, by Schonwetter and Van Wiele. Based on data collection in South Africa and Kenya, the authors probe the extent to which social entrepreneurs can make use of fab lab makerspaces and 3D printers to take social innovations forward. The research found that, among other things, social entrepreneurs in both countries do indeed make use of fab labs and 3D printers--but the social entrepreneurs studied tended to favour purchasing or building their own open source 3D printers over using printers made available by fab labs.

It is hoped that readers of this thematic issue will be able to gain a deepened understanding of the lived practical realities of African collaborative innovators, and of these innovators' socio-economic, technological and political contexts.