ORF ISSUE BRIEF

JUNE 2017
ISSUE NO. 183

INDIAN PERSPECTIVES ON THE G20 SUMMIT 2017

E-commerce and the Digital Economy: How the G20 can help Africa overcome its digital divide

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ABSTRACT Africa is facing a digital divide. Access to the internet and related digital services is low, and in most countries, the supporting regulatory framework is not in place; nor are the necessary data and logistics infrastructure. At the same time, there are various examples of e-commerce success stories across the continent; and the wide use of mobile phone technology has created many new opportunities for African entrepreneurs and consumers alike. It has also widened the reach of key government services. To cross this divide and take full advantage of the benefits that can be derived from participation in the digital economy, decisive action is needed in three main areas: regulation, education, and infrastructure.

INTRODUCTION

E-commerce can be a powerful driver of economic growth, inclusive trade, and job creation across the African continent. Research shows a strong correlation between the increased use of digital technologies and greater productivity, and a resultant impact on competitiveness and economic growth.[1] Information and Communication Technology (ICT) is now widely seen as a tool for socio-economic transformation in less-developed countries (LDCs).[2] It has the potential to catalyse growth by allowing LDCs to leapfrog the industrial revolution phase of development altogether and granting them the opportunity to catch up quickly with the Western world.

ICTs – particularly mobile phone technology – have had a considerable impact on the African economy. Mobile technologies and services generated 6.7 percent of Africa's GDP in 2015 and supported the creation of 3.8 million jobs in the same year.[3] Increased ICT uptake has also allowed for the delivery of key government services to remote rural communities.[4] Despite the rapid proliferation of ICTs, however, Africa is experiencing a digital divide. Access to the internet and related digital services is low, with penetration levels hovering at a meagre 20 percent.[5] The G20 must, therefore—in pursuit of its development partnership with the continent—take a holistic and systematic approach to help African countries cross this divide and fully realise digital dividends. This should involve supporting African initiatives to develop and (where appropriate) harmonise regulatory framework, strengthen supporting infrastructure, and educate and skill the youth, entrepreneurs and the workforce at large on ICT- related aspects.

HARMONISING LAWS AND REGULATIONS

Though the creation and effective enforcement of amenable laws is not a precondition for the initiation of e-commerce, it is essential for its sustainable growth.[6] After all, a supportive regulatory framework plays a pivotal role in brokering trust and securing online transactions between enterprises, public authorities, and citizens. While no ideal legal framework for e-commerce exists, research indicates that the availability of relevant laws in four legal areas – e-transactions, consumer protection, privacy and data protection, and cyber crime – is essential for bolstering consumer confidence in digital transactions.[7] Though developed countries have such basal framework in place, most African countries do not, and legislation addressing these areas remains relatively scant.[8] Beyond having a basic enabling regulatory framework, it is also necessary to establish legislation that addresses areas of law which affect cyber activities and raise broader issues of concern, such as intellectual property rights, competition, taxation, and information security.[9]

Efforts to harmonise legal principles came relatively late to Africa, resulting in disparate legal frameworks among nation States in particular regions.[10] The African Union Convention on Cyber-security and Personal Data Protection, for instance, was adopted only in 2014.[11] The Convention aims to establish regional and national legal frameworks for cyber-security, electronic transactions, and personal data protection.[12] Though the African Union (AU) has 54 member states, the actual impact of the Convention depends on ratifications, of which, as of mid-2016, there were none.[13] Regional initiatives tackling harmonisation have been taken up as well but have met with limited success.[14]

Against this background, this paper recommends that the following steps be taken to establish a more amenable regulatory regime for e-commerce in Africa:

1. A Framework of Norms for Digital Africa

A broad basal framework enunciating best practices and principles in cyber laws should be created for the entire continent. This document could then form the normative basis for national laws pertaining to e-commerce.

This should be facilitated through the revision of an existing legislation such as the AU Convention on Cyber-security and Personal Data Protection. The Convention should be amended to include provisions pertaining to consumer protection and information security. The process should begin with a cyber law audit to assess the extent of legal revision required. The audit can be carried out by an international organisation like the United Nations Conference on Trade and Development (UNCTAD). The provisions within the document should adhere to the principles enunciated in the model laws and guidelines published by various UN agencies and the OECD to bolster e-commerce.[15] Specifically, these include the United Nations Commission on International Trade Law's (UNCITRAL) Model Law on Electronic Commerce, the UNCITRAL Model Law on Electronic Signature, the United Nations Convention on the Use of Electronic Communications in International Contracts, and the OECD Guidelines on Tax Reform for the Digital Economy.[16] Additionally, the G20 can provide political and financial support to the AU to ensure the widespread acceptance of this report.

Garnering absolute consensus, in this regard, may prove challenging as there is a fair amount of heterogeneity within the African continent – not only in terms of socio-economic status but also in digital competencies. Thus, the Convention should address only broad issues within the relevant legal areas. To ensure a modicum of regulatory coherence, however, the G20, in conjunction with private enterprises and international organisations like the UN and the OECD, could set up work groups to cater to the specific regulatory needs of different African countries.

2. Enforcement of Cyber Laws

At an institutional level, the G20 can help African States establish enforcement agencies to manage and monitor electronic services, combat cyber offences (e.g., a national CERT), and protect the processing of data. At present, only 11 African countries have a CERT or CERT affiliate in place.[17]

3. Capacity building initiatives for lawmakers, parliamentarians, and the judiciary

The lack of proper understanding amongst African parliamentarians, policymakers, and judicial officers of the legal issues surrounding e-commerce poses a significant barrier to the creation and adoption of a supportive regulatory framework for e-commerce.[18] G20 countries should therefore facilitate capacity-building initiatives aimed at these individuals with the assistance of regional and international organisations such as the Commonwealth Secretariat, the UNCTAD, and the UNCITRAL. This could include supporting initiatives aimed at educating policymakers on the benefits of digitalisation.

Most of the organisations mentioned above have already carried out cyber law harmonisation projects in Africa at the regional level.[19]

4. Supporting digital trade and investment with consistent, aligned taxation systems

Taxation plays a particularly important role in the future of ICT uptake and e-commerce in

Africa. Revenue generation and collection are decidedly difficult in the continent. Being a reliable source of revenue for most governments, the mobile sector often finds itself to be the most heavily taxed.[20] In addition to the regular business taxes, telecommunications operators in most African countries are generally subjected to sector-specific taxes. Taxes amount to a substantial proportion of the total cost of mobile ownership in a majority of African nations.[21] Mobile handsets and ICT equipment are also subjected to import and luxury taxes.[22] The current tax regime creates a significant affordability barrier for the African people and discourages investment in ICT infrastructure projects. Mobile solutions represent the most viable infrastructure for e-services in Africa due to the high degrees of financial exclusion, and the limited availability and cost of fixed lines. Approaches to taxation must, therefore, be balanced with these considerations if African governments wish to bridge the digital divide and provide adequate infrastructure and services to their citizens. Specifically, efforts must be made to ensure that the current taxation schemes no longer act as unnecessary barriers to growth and a deterrence to investment in digital products and services. In this vein, G20 countries could aid in the adoption of better taxation systems by:

- Assisting in the establishment of mechanisms to prevent tax evasion and the circulation of 'black money' within African economies
- Providing financial support for the adoption of technological solutions to aid revenue collection

5. Competition Policy

The African telecommunications market is highly concentrated, with the continent's five largest telecommunications operators supplying 64 percent of total connections.[23] Their widespread presence leads to a fair amount of multimarket contact which, when coupled with the current regulatory framework, could set the stage for the cartelisation of the sector.[24] Further, the significant involvement of States in the delivery of mobile services often leads to regulatory interventions that thwart competition.[25] Illustratively, it is quite common to find regulations that limit entry (caps on licenses), favour incumbents (rules that allow price discriminations or allow trading associations to set standards), and limit options for users (rules forbidding the unlocking of SIM cards entail high switching costs for users).[26] Regulations also prevent operators from sharing backbone infrastructure with one another.[27] As there is a significant correlation between internet access and market structure,[28] African countries, in consultation with the G20 and international organisations should focus on formulating competition policies aligned with OECD best practices and UN model laws. This would help foster a more dynamic and open telecommunications market catering to the individual needs of different African nations.

STRENGTHENING SUPPORTING INFRASTRUCTURE

Another barrier to the success of e-commerce in Africa is poorly developed infrastructure. Despite the rapid growth of ICT infrastructure in recent years, access to broadband remains relatively low across the continent.[29] Further, supporting infrastructure such as logistics, transportation, and postal services remain significantly underdeveloped.[30] Modern warehouses are relatively scarce across the continent, despite an increased demand for high-quality logistics spaces.[31] Road and rail links between key economic hubs remain patchy, leading to high conveyance costs and lengthier delivery times.[32] Access to postal delivery services is low and geographically unbalanced.[33] Moreover, many countries lack coherent addressing systems that identify streets and buildings.[34]

As robust infrastructure is a critical growth lever for the digital economy, African countries should identify a series of actions to improve the quality of investment planning and project preparation, facilitate standardised contracting and structuring, make long-term sources of capital possible, and support the long-term capacity-building efforts of public institutions.[35] Further, African nations must also agree to actions to lower barriers to investment, increase the availability of investment-ready projects, help match potential investors with projects, and improve policy delivery.[36] Broadly, the G20 can assist these African initiatives by doing the following:

- Developing a knowledge-sharing network to aggregate and share information on infrastructure projects and financing between governments, international organisations, development banks, national infrastructure institutions, and the private sector;[37]

- Helping African countries address key data gaps that are of concern to investors;[38]

- Building the capacity of officials to improve institutional arrangements for infrastructure by sharing best practice approaches;[39]

- Enhancing investment opportunities by aiding the development of a consolidated database of infrastructure projects, connected to national and relevant multilateral development bank databases, to help match potential investors with projects.[40]

1. Specialist Financing Facility

Addressing Africa's infrastructure deficit may also require the establishment of a specialist financing facility. Extant institutional architectures – such as that of the Africa50 – could be leveraged for this purpose. The Africa50 was established by the African Development Bank (AfDB) as a new investment vehicle to help catalyse greater private sector investment in African infrastructure. Notably, its investment mandate includes "high impact regional and national projects in the energy, transport, ICT, and water sectors".[41] The Africa50's advantage lies in the fact that though it is primarily commercial investment vehicle, it ensures that its projects are development-oriented.[42] Additionally, contrary to traditional private funding, Africa50 employs a regional approach which is critical for consistent infrastructure provision. The G20 can assist this initiative by:

- Providing political support to increase the prospect of institutional success:[43] A G20 endorsement would lend legitimacy, thereby encouraging the participation of other African countries. This, in turn, would generate further political and economic momentum behind the effort; building critical mass is essential for the success of cost-intensive endeavours like infrastructure investment. Moreover, a G20 endorsement could push down the perceived risk profile of investments, cutting operational costs and making it easier for investments to succeed.

- Providing economic support to leverage new sources of finance: As the Africa50 is not a familiar name in international circles, the G20, backed by the B20, could provide a network to raise awareness about this effort and increase the potential interest of institutional investors.

- Ensuring coordination and coherence with existing efforts: The G20 can help foster links between Africa50 and related multilateral initiatives such as those of the African Development Bank (AfDB). It is necessary that infrastructure development initiatives are carried out in a coordinated manner, so as to ensure complementarity and avoid the duplication of endeavours. This includes the G20's Global Infrastructure Hub and the World Bank's Global Infrastructure Facility.[44] As G20 members are key players in these existing initiatives, they are perfectly placed to ensure coordination and coherence between ongoing activities and Africa50.[45]

2. Private Sector Investment

Aside from Government interventions, private sector initiatives are also key for overcoming infrastructure deficits. Facebook, for instance, is driving connectivity through its carrier subsidised Free Basics application and Express Wifi hubs. Eventually, the social media giant aims to use its Aquila solar powered drones, satellites and other advanced technology to bring access to remote rural areas. Similarly, e-commerce giants like Amazon Inc., could be tapped to provide logistics infrastructure within the continent. In this context, G20 countries could develop a framework to encourage private sector investments in African ICTs as a part of their larger development cooperation agendas.

EDUCATION AND THE DIGITAL ECONOMY

A strong correlation exists between education and a successful digital economy. Education can potentially increase the human capital inherent in the workforce, augment the innovative capacity of the economy through new knowledge on new technologies, products and processes, and facilitate the diffusion and transmission of knowledge requisite to process new information and to implement new technologies crafted by others.[46] Thus it is pivotal that G20 countries support African initiatives that address the intersection between education and development, specifically those tailored to provide early exposure to the digital economy. The SMART Africa scholarship fund could be one such benefactor. The fund was established under the SMART Africa Alliance – an initiative that commits to using ICTs for socio-economic development.[47] The fund is to be used to facilitate the high quality training of African professionals in the ICT sector through dedicated African centres of excellence in ICT.[48] The G20 could also help with the establishment of new cooperation mechanisms between regional and international institutions or workgroups to advocate for increased education around digitalisation and provide additional investment in the up-skilling and re-skilling of entrepreneurs and workers across Africa.[49]

India, for its part, has carried out a number of successful capacity-building initiatives in Africa both at the bilateral level (e.g., Indian Technical and Economic Cooperation Program or ITEC, Special Commonwealth Assistance for Africa Program or SCAAP) as well as pan-Africa (e.g., Pan-African E-network project).[50] India should continue building on the success of these programmes and facilitate capacity-building projects that cater to the skilling needs of the new economy.[51] In this context, a focus on a digital skills set along with a framework to coordinate the interaction with the silver-collar worker are essential, but more so is the understanding that these will continue to evolve.[52] Further, India should set up a knowledge-sharing programme with African governments so that the latter can learn from India's experience with digitalisation and the ensuing policy challenges and opportunities it creates for developing countries. India can also establish a common framework with African states for research to understand dynamics and projections of labour markets across all geographies, societal layers including the community level, as well as industries, and continuously validate the long-term outlook. Specifically, this could include the development of data analytics solutions that cater to the complex labour market dynamics imposed by globalisation, digitalisation and financialisation, and their interdependencies.

ENDORSING THE e-WTP

At this stage, the continent does not have a common position on e-commerce, or a platform at which these issues are widely discussed; and the experience and views of countries and think-tanks is likely to differ widely. The G20 could lend political support to help African nations endorse the concept of the Electronic World Trade Platform (eWTP)– a multistakeholder initiative led by the private sector – to overcome this conundrum. The eWTP could provide a medium for public-private dialogue that can incubate the rules to foster the right policy and business environment for cross-border e-commerce development.[53] The eWTP should:

- Promote public-private dialogue to improve the business environment and nurture future rules for cross-border e-commerce in some important areas, such as simplification of regulations and standards and harmonisation of tax practices;[54]
- Cooperate with international organisations, such as the World Trade Organization (WTO), to prioritise African e-trade development needs;[55]
- Aim to expedite the use of e-trade and the digital economy through the construction of e-trade infrastructure and the adoption of best practices – such as building cross-border e-trade experiment zones – to solve the pending problems faced by SMEs, especially in developing countries.[56]

A further concern is that African nations have not taken a discursive interest in e-commerce issues at a multilateral level.[57] The G20 should support engagement by African countries on e-commerce issues to encourage their greater engagement within larger fora, such as at the WTO. A positive step in this regard would be granting the AU a permanent seat in the G20.[58] The G20 countries should also encourage African nations to participate in wider trade deals that incorporate aspects of this digital economy such as the Trade Facilitation Agreement (TFA).[59]

The G20 partnership with Africa addressing issues of e-commerce and the digital economy should be designed in a way that is informed by lessons from the past. An assessment of previous approaches such as the African Partnership Forum reveals that a dynamic of this sort can only work if the partnership is Africa-owned and includes all strategic partners in the continent.[60] This means that the agenda of systematic dialogue between the G20 and Africa must largely be dictated by the African side. A good starting point would be to first develop an informed framework for engagement that accurately reflects the regulatory, infrastructure, and education priorities and interventions of African countries. This would then eliminate the traditional discord between North-South cooperation and South-South cooperation, and address key policy fields for cooperation.[61] It would also ensure policy coherence between all the different work strands of the G20 and guarantee that cooperation would not be confined to bilateral initiatives between individual African and G20 countries.[62] A measured and coordinated approach will ensure long-term success for the Africa-G20 partnership and the development of a robust digital economy within Africa.

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ENDNOTES

1. Mckinsey Global Institute, 2013 Lions Go Digital: The Internet's Transformative Potential in Africa (Mckinsey Global Institute, 2013), http://www.mckinsey.com/industries/high-tech/our-insights/lions-go-digital-the-internets-transformative-potential-in-africa.
2. Ibid
3. GSMA, 2016 The Mobile Economy Africa 2016 (London: GSMA, 2016), https://www.gsmaintelligence.com/research/?file=3bc21ea879a5b217b64d62fa24c55bdf&download.
4. Imme Philbeck, 2017 Connecting the Unconnected: Working together to achieve Connect 2020 Agenda Targets (Geneva: ITU, 2017), http://broadbandcommission.org/Documents/ITU_discussion-paper_Davos2017.pdf
5. Ibid
6. United Nations Conference on Trade and Development, Harmonizing CyberLaws and Regulations: The experience of the East African Community, (New York and Geneva: UNCTAD, 2012),, http://unctad.org/en/PublicationsLibrary/dtlstict2012d4_en.pdf.
7. Ibid
8. Ibid
9. Ibid
10. United Nations Conference on Trade and Development, Review of e-commerce legislation harmonization in the Economic Community of West African States, (New York and Geneva: UNCTAD, 2015), http://unctad.org/en/PublicationsLibrary/dtlstict2015d2_en.pdf
11. Ibid
12. African Union. "Convention on Cybersecurity and Personal Data Protection." June 27, 2014. https://www.au.int/web/en/treaties/african-union-convention-cyber-security-and-personal-data-protection.
13. Ibid
14. United Nations Conference on Trade and Development, Review of e-commerce legislation harmonization in the Economic Community of West African States, (New York and Geneva: UNCTAD, 2015), http://unctad.org/en/PublicationsLibrary/dtlstict2015d2_en.pdf
15. United Nations Conference on Trade and Development, Cyberlaws and regulations for enhancing e-commerce: Case studies and lessons learned, Geneva: 2015, http://unctad.org/meetings/en/SessionalDocuments/ciiem5d2_en.pdf.
16. Ibid
17. AfricaCERT, List of National CERTs. AfricaCERT. https://www.africacert.org/home/countries/.
18. United Nations Conference on Trade and Development, Cyberlaws and regulations for enhancing e-commerce: Case studies and lessons learned, Geneva: 2015, http://unctad.org/meetings/en/SessionalDocuments/ciiem5d2_en.pdf.

19. Ibid

20. GSMA & Deloitte, Digital inclusion and mobile sector taxation 2016, (London: GSMA, 2016), http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/07/Digital-Inclusion-and-Mobile-Sector-Taxation-2016.pdf.

21. Ibid

22. Ibid

23. World Bank Group, 2016 Breaking Down Barriers: Unlocking Africa's Potential through Vigorous Competition Policy, (Nairobi: World Bank, 2016), http://documents.worldbank.org/curated/en/243171467232051787/pdf/106717-REVISED-PUBLIC-WBG-ACF-Report-Printers-Version-21092016.pdf.

24. Ibid

25. Ibid

26. Ibid

27. Ibid

28. Ibid

29. Mckinsey Global Institute, Lions Go Digital: The Internet's Transformative Potential in Africa (Mckinsey Global Institute, 2013), http://www.mckinsey.com/industries/high-tech/our-insights/lions-go-digital-the-internets-transformative-potential-in-africa.

30. SAIIA, DIE &IfW, Communique of the Conference Co-Hosts, T-20 Africa Conference, 2017, https://www.tralac.org/images/docs/11255/t20-africa-conference-communique-of-the-conference-co-hosts-february-2017.pdf.

31. Knight Frank, Logistics Africa 2016, (Africa: Knight Frank, 2016), https://kfcontent.blob.core.windows.net/research/1114/documents/en/2016-4022.pdf.

32. Ibid

33. Universal Postal Union, Addressing the World – An address for everyone, Switzerland: UPU, 2012, http://danmarksadresser.dk/file/389519/UPU_whitePaperAddressingEn_2012.pdf

34. Ibid

35. G20. "The G20 Global Infrastructure Initiative." News release. G20 Australia. http://www.g20australia.org/sites/default/files/g20_resources/library/g20_note_global_infrastructure_initiative_hub.pdf.

36. Ibid

37. Ibid

38. Ibid

39. Ibid

40. Ibid.

41. Stephenson, Matthew. "Infrastructure Investment in Africa: How the G20 can help Africa50 Succeed." T20 Germany (web log), February 7, 2017. http://blog.t20germany.org/2017/02/07/infrastructure-investment-africa-how-g20-can-help-africa50/.

42. Ibid
43. Ibid
44. Ibid
45. Ibid
46. Hanusek, E. A., and L. Woßmann. "Education and Economic Growth." Internation Encyclopedia of Educationq 2 (2010): 245-52. http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%2BWoessmann%202010%20IntEncEduc%202.pdf.
47. "Smart Africa Strategic Vision." Smart Africa. https://smartafrica.org/IMG/pdf/smart_africa_strategic_vision.pdf.
48. Ibid
49. T20.Communiqué of the Conference Co-Hosts. (Johannesburg: Communiqué of the Conference Co-Hosts, 2017), 6. https://www.die-gdi.de/fileadmin/user_upload/pdfs/veranstaltungen/2017/20170203_T20_Africa_Communique.pdf.
50. Indian Technical and Economic Cooperation Programme, Partner Countries. Ministry of External Affairs, India. https://www.itecgoi.in/ITEC%20Countries.php
51. Ibid
52. Kenneth L. Nichols, "Optimizing The Silver Collar Worker: In The Shoes Of The Older Employee,"International Journal of Organizational Theory and Behaviour 4 (2001): 230.
53. B20. "Towards an Innovative, Invigorated, Interconnected and Inclusive World Economy." 2016 B20 Policy Recommendations for the G20. B20 China. https://www.b20germany.org/fileadmin/user_upload/documents/B20/b20-policy-recommendations-2016.pdf
54. Ibid
55. Ibid
56. Ibid
57. T20.Communiqué of the Conference Co-Hosts. (Johannesburg: Communiqué of the Conference Co-Hosts, 2017), 6. https://www.die-gdi.de/fileadmin/user_upload/pdfs/veranstaltungen/2017/20170203_T20_Africa_Communique.pdf.
58. T20. "Think 20 Solutions: G20 and Africa – Ready for a Steady Partnership?" G20 Germany. http://www.t20germany.org/2017/05/29/t20-solutions-g20-africa-ready-steady-partnership/.
59. Ibid
60. German Council for Sustainable Development, Recommendations of the German Council for Sustainable Development to the German Government, (Berlin, 2017) 4.
61. Ibid
62. Ibid

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