TICAD7

NIPPON INSTITUTE FOR RESEARCH ADVANCEMENT

NIRA

The African Economies Today

African economies are becoming energized through a process of "leapfrogging" with the introduction of advanced technologies, in particular information and communications technology (ICT). With TICAD7 approaching, in this issue we look at Africa today, and attempt to deepen consideration of the creation of a new relationship between Africa and Japan.

August 2019
MY VISION No.43

MY VISION…

… presents interviews with five experts concerning a specific topic, enabling us to provide a concise overview of a diverse range of opinions concerning problems directly facing Japan.

Solomon K. Maina, M.B.S.
Ambassador of the Republic of Kenya in Japan

German Cufre
Regional Lead, Telecom, Media and Technology Investments, Africa and Latin America

Hidekazu Tanaka
CEO, Rexvirt Communications, Inc.

Ashraf Patel
Senior Research Associate, Institute for Global Dialogue

Tadashi Yokoyama
Head, Asia External Representation Office, African Development Bank （＊）

（＊）Author's position at the time of writing.

Expert Opinions

The African Economies Today

How should we view the process of energization of African economies by digital technology?
What is necessary in order to realize the further development of Africa's economies?

Leapfrogging towards the realization of the SDGs

Solomon K. Maina, M.B.S.
Ambassador of the Republic of Kenya in Japan

Keywords…Leapfrogging, financial services, e-government, e-commerce, Japanese investment in ICT

Infrastructure sharing will spur new breakthroughs

German Cufre
Regional Lead, Telecom, Media and Technology Investments, Africa and Latin America

Keywords…Promotion of Internet diffusion, digital infrastructure necessitating huge investments, infrastructure sharing

Domestic technological accumulation will drive further innovation in Africa

Hidekazu Tanaka
CEO, Rexvirt Communications, Inc.

Keywords…Innovative services using new technologies, experience of actual work procedures among technicians and engineers, cooperation with advanced nations, African Continental Free Trade Agreement (AfCFTA)

Increasing the productivity of Africa's manufacturing sector is the key

Ashraf Patel
Senior Research Associate, Institute for Global Dialogue

Keywords…Growing culture of innovation hubs, rapid development of service industry due to ICT, undeveloped manufacturing industry

Japan can use ICT to propel a win-win relationship with Africa

Tadashi Yokoyama
Head, Asia External Representation Office, African Development Bank（＊）

Keywords…Turning huge development challenges into opportunities to utilize ICT, Africa's potential to become a major global ICT power, expectations on Japan in the area of business development

（＊）Author's position at the time of writing.

About this Issue

Dramatic Growth in the African Economies
- Contribution to the Resolution of Three Issues is demanded from Japan –

Kazuhiro Higashi
NIRA Executive Vice President, Director, President, and Representative Executive Officer of Resona Holdings, Inc.

Keywords…African economies, Leapfrogging, Innovative services using ICT, African diversity, International Conference on African Development (TICAD), Japan's responsibility, Stimulus for Japan

Interview period：June – July, 2019
Interviewer: Mari Kawamoto（NIRA Research Coordinator, Researcher）
Shota Watanabe（NIRA Research Coordinator, Researcher）

Leapfrogging towards the Realization of the SDGs

Solomon K. Maina, M.B.S.
Ambassador of the Republic of Kenya in Japan

Over the last decade or two, Africa has leapfrogged in terms of innovation and the development of ICT. The developed world has been the leader up to date as far as ICT development is concerned, but most African countries are now connected to the international broadband system, and the world is paying close attention. Connection through undersea fiber cables has enabled Kenya to achieve internet speeds almost equivalent to Japan's. Development driven by ICT in Africa is particularly conspicuous in the three areas of financial development, e-government and e-commerce.

First, in the area of financial development, to take Kenya as an example, the ICT infrastructure is very well developed. Indeed there has been tremendous growth of mobile telephony platforms for financial services such as money transfers commonly known as M-Pesa to make payments. Using mobile payment, one can easily conduct business regardless of where they are. The platform is important to people's livelihoods for example, an ordinary farmer can sell his or her products from the farm and be paid using their mobile telephone. Hence there is economic inclusion of all citizens. The use of mobile telephones in this manner has lifted at least two or three percent of the Kenya's households out of poverty and hunger. This alleviation of poverty will help Africa to meet the demands of the SDGs.

The second area is e-government. In the past, African governments were criticized for being inefficient in terms of delivery of services to citizens. African governments are now working to enhance transparency and accountability, improve access to services, and increase confidence in government. As part of "Kenya Vision 2030", our blueprint for development, the government introduced an e-citizen platform that enables citizens to perform a variety of administrative procedures online. In this regard, the Government set up Huduma(*) centers throughout the country where Kenyans can access all government services under one roof.

The third growth area is e-commerce. The number of online shoppers in Africa is increasing, and this is greatly changing people's habits. This is especially the case among the middle-income segment, which is receptive to new trends. The scale of Africa's e-commerce markets is still small compared to those of the developed nations, but that gives us room for future growth.

Japan has supported Africa in many areas – infrastructure, human resource development, agriculture energy -– but when it comes to ICT, Japan lacks a major footprint in Africa. The US, China and Korea are already involved in changing African societies using ICT, and it is a pity that Japan is lagging behind and missing out in this important sector. At TICAD 7 in August, we will discuss "Africa now" as it relates to Business. My hope is that Japan will actively engage in direct investment in the ICT field, and "plug in" to African economies.

(*) "Service" in Swahili

H.E. Mr. Solomon K. Maina is a career diplomat with over 32 years' experience in foreign affairs and the diplomatic service. After graduating from Ohio University in the United States with an M.A. in International Affairs, H.E. Amb. Maina joined Kenya's Ministry of Foreign Affairs. He has served in positions including First and Second Counsellor in the Embassies and High Commissions of the Republic of Kenya to the United Kingdom, Uganda, Pakistan and Italy. He undertook his Diplomacy Training in Oxford University, U.K. H.E. Mr. Maina's other roles prior to taking his present position in 2014 included Director of the Multilateral Affairs Directorate, Ministry of Foreign Affairs, and Chief of Protocol, Government of Kenya. As East Africa's largest economy, Kenya is driving the development of ICT in Africa.

Infrastructure Sharing will spur New Breakthroughs

German Cufre

Regional Lead, Telecom, Media and Technology Investments, Africa and Latin America

The rise of the digital economy offers a once-in-a-generation opportunity to unlock new pathways for growth, economic mobility, innovation and jobs in emerging markets. Technology is already disrupting development models across all sectors, and the challenge ahead for emerging markets – particularly Africa – is to quickly drive up internet penetration, the bedrock of a digital economy.

Recent progress in many areas of the digital economy provides inspiration for what the future could hold. Rising mobile phone penetration, improving broadband connectivity and the spread of mobile money across Africa are unleashing new opportunities for people and businesses every day. Unique mobile subscriber penetration has reached 53%, up from 21% in 2010[1]. In 2017, mobile technologies and services generated 7.1% of GDP. Mobile money is driving financial inclusion, with the number of accounts doubling to 21% between 2014 and 2017[2]. African e-commerce is also rapidly growing, at an estimated annual rate of 40%.

Looking ahead, the mobile economy in Africa is expected to generate more than 7.9% of GDP[3] by 2022 and 75% of the impact on growth is expected to come from traditional industries. For instance, agriculture is set to grow by 10-20%, largely driven by technological improvements.

But, capturing the full benefit of the digital economy will require greater investment in digital infrastructure.

While Africa currently has the fastest growing proportion of internet users, it still has the lowest levels of internet access in the world at 24.4% - less than half of the global average of 51%[4]. Bringing connectivity to offline populations and switching on high-speed services for the already connected is the first step for growing the digital economy. To achieve this, countries will need recourse to new business models, such as infrastructure sharing to attract broadband companies and other market players, especially in rural areas.

The World Bank Group is doing its share to support this agenda. In 2018, it became a founding partner of the Africa Moonshot initiative and is committing US$25 billion to help realize the goal of digitally connecting every individual, business and government in Africa. We are also bringing to bear our technical expertise working with digital services in various developing countries.

With greater investment in the digital economy, Africa may be able to accelerate, possibly even leap over the traditional steps to economic development.

[1] GSMA
[2] GSMA, State of the Industry Report on Mobile Money 2018
[3] GSMA
[4] ITU, 2018

(Submitted manuscript)

Leads Telecom, Media and Technology investments in Africa and Latin America for the International Finance Corporation. Joined IFC in 2006 and has been part of the investment team focused on telecommunications infrastructure since 2008. Currently responsible for overseeing equity and debt transactions in 85 countries across all telecom infrastructure subsectors including broadband, data centers, independent tower operators and traditional mobile operators. Prior to IFC, led an acquisitions turnaround team at a distressed asset fund out of Argentina and worked as a strategy/ turnaround consultant with Booz Allen & Hamilton based in Chicago (USA), Sao Paulo (Brazil) and Buenos Aires (Argentina). Holds a BA from Universidad de San Andres and an MBA from Kellogg Graduate School of Management.

Domestic Technological Accumulation will drive further Innovation in Africa

Hidekazu Tanaka
CEO, Rexvirt Communications, Inc.

In Africa, the use of smartphones is continuing its spread, in particular among young people. An increasing number of students are studying IT, generating energy in African societies for the creation of new innovations using ICT. Highly innovative new services are appearing that apply new technologies to the solution of local issues, such as Kenya's mobile money transfer service M-Pesa and Rwanda's Zipline drone delivery service. Many of these initiatives are being realized in cooperation with developed nations, and this is contributing significantly to technological development in Africa.

On the other hand, it will be some time before Africans utilize ICT to generate innovation with no external input. A stratum of developers possessing technological experience is an important factor in the planning and development of a diverse range of systems, and this is what Africa still lacks. What Africa needs now is for those people who have studied IT to find jobs and gain experience. There is also no other way for engineers to achieve the level of service quality demanded by the international market than by gaining an intuitive understanding through the experience of actual work procedures.

China is today an IT superpower, but it also went through the experience of acting as an offshore production base and subcontractor for advanced nations. Precisely now, when ICT services have diffused so far in the continent, is the time for African nations to gain experience of development domestically, accumulate technologies, and build up their strength. Our company has established an offshore development business in Rwanda, and we are offering employment to local engineers. Our aim is to provide these engineers with experience of a large number of development projects, enabling them eventually to apply this experience in solving their own countries' problems themselves. Happily, African nations have a positive attitude towards accepting entry by companies from developed nations. If the developed nations and Africa are able to find ways to drive development together, we will be able to create projects that not only succeed as businesses, but also help to advance development in Africa.

Even if we attempt to describe Africa in a few words, it is a continent that has fifty-four countries, each of which has differences in language, culture and history, and each of which is competing with the others. There have also historically been heated conflicts between close neighbors. I believe that the course of development in Africa will be for certain countries to develop slightly in advance of their neighbors. These countries will gradually draw in their neighbors until a market of a specific size is formed and services begin to be provided within that market. In the future, we can expect businesses and services to develop that will link these markets and services, and the fruits of innovation will be shared throughout the continent. From this perspective also, the entry into force of the African Continental Free Trade Agreement (AfCFTA) will provide a spur to growth.

Mr. Tanaka's company Rexvirt Communications is a software development business that also supports the entry of Japanese companies into African markets. Prior to founding Rexvirt, Mr. Tanaka worked for a SoftBank Group development company and served as the CTO of a US venture company in Japan. In 2014, Rexvirt launched the African software development company WiredIn LTD as a Group company in Rwanda. WiredIn LTD provides software development services for Japan, Africa, Europe and the United States. Through its business activities, the company endeavors to support the development of the ICT industry in Africa.

Increasing the Productivity of Africa's Manufacturing Sector is the Key

Ashraf Patel
Senior Research Associate,
Institute for Global Dialogue

There is a growing culture of IT-related startups and innovation hubs in many African countries. Silicon Savannah in Kenya and Silicon Cape and the Cape Innovation and Technology Initiative in South Africa are examples of this. Above all, the digitalization of the government sector has the potential not only to improve governance, but also to improve public participation in government and promote accountability from administrations. The use of Big Data would have a significant effect on decision making, especially in health, housing, urban planning and transport systems.

At the same time, by contrast with the growth models of the advanced nations and Asia, Africa faces a major contradiction in its economic development. This is the fact that there has been a structural transformation from agriculture to services without building the manufacturing sector. Most of the large numbers of workers moving into the cities from rural areas in the last 20 years have not gone into the manufacturing sector; they have mainly gone into services. There is no doubt that this trend has been propelled by ICT. In developing countries, manufacturing is the key for job creation and poverty reduction. The development of the manufacturing sector is also desirable in terms of reducing income disparities within individual nations.

Professor Dani Rodrik of Harvard University has pointed out that the financial sectors of African countries are integrated into global financial markets, but their manufacturing industries are not integrated into the supply chains of advanced nations. The added value per capita of Africa's manufacturing sector overall is less than that of Asia or Latin America, and the sector produces only unsophisticated goods. As the continent's manufacturing sector stands, it is not capable of joining global supply chains. In order to be incorporated in the production processes of advanced nations, it will be essential for Africa's manufacturing sectors to supply high added value products. The advanced nations that manufacture high added value goods demand high added value products even when ordering parts.

What is required to overcome the current situation is solid and smart industrialization policies. Increased spending on research and development by governments would provide a tailwind. It will also be necessary to retrofit factories with new technologies and robotics, improving their systems to create smart factories. This can improve regional value chains and grow the small and medium enterprise market. Retraining of workers and skills development is also necessary. Without the establishment of a solid manufacturing sector, Africa will not be able to become an IT superpower like China.

Mr. Patel studies and formulates policy recommendations regarding regulatory policy and innovation policy in relation to digitalization and ICT at the Institute for Global Dialogue, an independent think tank based in Pretoria, South Africa. He has been involved in fields including public policy, ICT policy, telecommunications regulations, and the ICT 4D (ICT for Development) concept in South Africa and Sub-Saharan Africa for more than 15 years. Mr. Patel also makes recommendations regarding the use of ICT in Africa at international conferences including ITU Telecom World and T20.

Japan can Use ICT to propel a Win-win Relationship with Africa

Tadashi Yokoyama
Head, Asia External Representation Office, African Development Bank (*)

Africa faces a wide range of development challenges, including lack of basic infrastructure, poverty and unemployment, as well as lack of access to healthcare, education and finance. Africa is of a large continent, about 80 times larger than Japan, but its population density is not high (about one-eighth that of Japan). It is not easy to connect the continent physically, for the movement of people and goods, electricity transmission and distribution, communication, and provision of services. However, Africa's development challenges and its potential are two sides of the same coin. Because the demand for overcoming these challenges is huge, Africa presents enormous business investment opportunities.

ICT and digital technology can play a significant role in this regard. Drones, aviation, satellites, and remote sensing technologies can expand the possibilities for overcoming the challenges of a large but not densely populated continent. The fact that Africa offers different institutional and regulatory environments from those of developed countries, and also the lack of legacy in the continent, are elements that can favor the utilization of ICT and digital technology. Through the use of ICT and related technologies, Africa has the possibility of solving development challenges in innovative ways, and the potential to rapidly realize a fourth industrial revolution and become a major global ICT power. Africa has great potential for leapfrog growth.

As an example of ICT technology turned to business applications, the use of mobile phones for remittance of electronic money and savings has begun to spread in countries where many people do not have bank accounts and physical payment networks have not been developed. There are no postal addresses in many areas of Africa, but the delivery and provision of goods and services using location information via mobile phones (virtual addresses) have also begun. It has become possible to provide medical and educational services (such as image diagnosis, online education, etc.) to remote locations. Many startups have begun to launch businesses in these areas.

What is expected from Japan is business development that also incorporates modern technologies such as ICT. If we understand local challenges and demands in Africa and provide solutions based on the available technology, there will be massive business opportunities that do not require large investments. In addition, we can expect stimulation of job creation and human resource development, if the Japanese private sector accelerates its business and investment in Africa.

Japan, which is facing a low birth rate and an aging population, and Africa, which has an abundant and youthful labor force, are in a complementary relationship. Some African business models may also be applicable in Japan. Taking advantage of TICAD 7, I genuinely hope that the first year of the Reiwa era will also become the first year in which the "win-win" relationship between Japan and Africa takes off, with Japan contributing to overcoming the development challenges in Africa, and Africa sharing the fruits of its growth with Japan.

(Submitted manuscript)

(*) Author's position at the time of writing.

Mr. Yokoyama was the Head of the Asia External Representation Office of the African Development Bank from 2015 to July 2019. At present, he is Deputy Vice Minister for International Affairs, Ministry of Finance of Japan. Before joining the African Development Bank, he enjoyed a 27-year career with the Japanese Government, serving in roles in which he had oversight over international affairs in the areas of ODA, international taxation, and financial cooperation.

【Thinkstock】

Dramatic Growth in the African Economies

– Contribution to the Resolution of Three Issues is demanded from Japan –

Kazuhiro Higashi

NIRA Executive Vice President/ Director, President, and Representative Executive Officer of Resona Holdings, Inc.

Africa: Leapfrogging towards Increased Economic Development

African economies have recently displayed significant growth. The dramatic growth that Africa has achieved since the early 2000s has been realized by what is termed "leapfrogging." By "leapfrogging," the technological progress achieved by developed nations allows developing nations to skip developmental stages, and rapidly realize dramatic improvements in quality of life and the level of industry.

As one aspect of this leapfrogging process, the successive appearance of innovative services that employ ICT is particularly noteworthy. For example, use of the mobile money transfer service M-Pesa, which commenced operation in Kenya in 2007, is rapidly increasing. This new service has made it possible for people to send money and make payments between remote locations even if they do not have bank accounts, and has significantly improved access to financial services in the rural areas of the country. Other services using M-Pesa's functions have also taken off, including savings account services and the provision of loans in cooperation with banks, and this has seen the number of registered M-Pesa users rapidly increase from 15 million in 2012 to 27 million in 2017. Given that lack of access to finance is considered an impediment to growth in Africa, this can be cited as a successful example of the use of digital technology in overcoming a specific problem.

How should we view the African economies today, against the background of this energization by digital technology, and additionally, what will it take to ensure that Africa's dramatic growth is sustainable? We put these questions to five experts in this issue of My Vision.

Resolving Development Issues using Digital Technology

All of the experts who take up these questions in this issue speak of a contemporary Africa that is taking flight with ICT. A diverse range of services are being provided in Africa using ICT, and the speed with which this trend is spreading is faster than it was in the advanced nations. How has digital technology brought such rapid change to a continent once considered to have been left behind by global development? The following points can be identified based on the responses of the experts in this issue.

First, the introduction of ICT and digital technology has a dramatic effect with regard to the resolution of problems. As Tadashi Yokoyama of the African Development Bank points out in this issue, while the African continent is enormous, its population density is only around one-eighth Japan's, and logistics, communication, and the establishment of networks for the provision of services is therefore physically not an easy matter. However, it is precisely this difficult environment that allows drones, requiring no existing distribution infrastructure such as roads and bridges, to display their effectiveness. Similarly, it is a living environment in which addresses cannot be specified that makes mobile telephones essential tools. Mr. Yokoyama indicates that there is an enormous potential demand for digital technology in Africa.

Another point of note in relation to Africa is the fact that a stance that promotes active cooperation with advanced nations is able to give birth to innovative services. Hidekazu Tanaka of Rexvirt Communications, Inc. informs us that many such innovative services in Africa have been realized through cooperation with the advanced nations. Efforts to establish businesses using ICT are being implemented in a variety of forms at innovation hubs established throughout Africa, and this is providing a boost to collaborative enterprises with advanced nations.

Three Impediments that hinder Leapfrogging

Nevertheless, further efforts are essential if Africa is to realize sustainable development. The experts in this issue point specifically to the establishment of infrastructure, the fostering of technicians and engineers, and the realization of increased productivity in the manufacturing sector.

German Cufre of the International Finance Corporation (IFC) points out that the Internet is the bedrock of a digital economy, and emphasizes the fact that raising what are currently the world's lowest levels of Internet access is an urgent task for Africa. Because digital infrastructure requires a huge investment, Mr. Cufre proposes the use of new business models, for example infrastructure sharing, in which multiple businesses share the use of base stations, masts, antennas, and other elements of network infrastructure.

Mr. Tanaka focuses on improving the skills of local technicians and engineers. It is difficult for ideas alone to generate innovation. The ability to realize ideas is created by honing technologies on the ground. The steady cultivation of a stratum of technicians and engineers possessing considerable experience of actual operations in their fields may be something of a detour, but it is also a sure path to development.

Taking a different perspective, Ashraf Patel of the Institute for Global Dialogue (IGD) points to the fact that Africa has skipped the stage of development of a manufacturing industry and moved in a single bound to the creation of a service industry as an oddity of Africa's industrial structure. The fear for Africa is that without a mature manufacturing industry, the continent will not be incorporated into the global supply system, and many young people will lose the opportunity for employment. Even from the perspective of seeking development around the axis of ICT, Africa requires a manufacturing industry as a foundation.

The Contribution demanded from Japanese Companies

It is clear that all of these points are serious issues that require urgent solutions. Giving them consideration, we recognize that they are all fields that are strengths for Japan, and there is therefore great potential for Japanese companies to cooperate in their resolution. However, at present Japan's level of interest in Africa's ICT industry is low. H.E. Solomon K. Maina, Ambassador of the Republic of Kenya in Japan tells us that Japan has long provided support for Africa in traditional ODA fields such as infrastructure, human resources development, agriculture, and energy. However, Japan is lagging behind the US, China, and South Korea in becoming involved in the field of ICT.

It should be noted that even if Africa is developing, income per capita is less than 20% of the global average, and the specific characteristics of each of the nations on the continent are very different. As a natural consequence, the mode of development and use of ICT and the issues facing development are also very different in different countries. It will be essential to obtain accurate information concerning each region of the continent, and to adopt the best and most appropriate approach for the particular partner and the specific situation.

In August this year, the Japanese government, together with the UN and other organizations, will host the 7th Tokyo International Conference on African Development (TICAD7) in Yokohama. The UN has a strong interest in Africa, and it is a region in which the organization is putting considerable effort into the resolution of development issues. As a major financial contributor to the UN, we can also say that the provision of support for the realization of sustainable growth in Africa is also a responsibility for Japan.

It would not only be Africa that benefits from this. For the Japanese, accustomed to the sluggish pace of a mature developed nation, exposure to the leapfrogging growth of African economies, something like the fast pace of an African runner, would no doubt provide a significant stimulus.

Mr. Higashi serves as NIRA's Executive Vice President, and is the Director, President, and Representative Executive Officer of Resona Holdings, Inc. and the Chairman of the Board, Representative Director, President and Executive Officer of Resona Bank, Limited.

This is a translation of a paper originally published in Japanese. NIRA bears full responsibility for the translation presented here. Translated by Michael Faul.

NIPPON
INSTITUTE FOR
RESEARCH
ADVANCEMENT

NIRA

The Nippon Institute for Research Advancement (NIRA) …

…is an independent, non-governmental Japanese think tank that focuses knowledge resources on policy issues to produce visions for the future.

Nippon Institute for Research Advancement (NIRA)

August 2019

Address : Yebisu Garden Place Tower, 34th Floor 4-20-3 Ebisu, Shibuya-ku, Tokyo, Japan
Homepage :http://english.nira.or.jp/
Facebook : https://www.facebook.com/english.nira/
E-mail : info@nira.or.jp