Session 8
ICT and African Business, Creating ICT-Enabled Economies for Better Growth

Dr. Kapil Kapoor
Director, Strategy and Operational Policies, African Development Bank

Mr. Kapoor welcomed everyone to the session on Information, Communication and Technology. This is a very interesting and an exciting sector, where a lot of changes are taking place on the continent the pace of which is really astounding. In the last decade, there has been a twenty-fold increase in broadband connections on the continent. Today, there are 750 million subscribers for cellular telephones on the continent. That is greater than European Union and the United States.

People are using telecommunications to leapfrog technology and accelerate development in all sectors. It is only happening in telecommunications or computers, but telecom is being used for crop insurance and agriculture, health systems and telemedicine and financial inclusion for transferring money.

Mr. Kapoor invited the panelists, who represent government agencies, parastatals like Camtel, private sector companies, to talk about how they see the telecom sector in Africa from their perspectives, which differs in the case of each agency.

Kenji Kaneko
Ministry of Internal Affairs and Communications
Director for International Policy Coordination, International Cooperation Division, Global ICT Strategy Bureau

Mr. Kaneko stated that he was offering support to Japanese companies overseas at the International Policy Coordination Bureau. The Ministry of Internal Affairs and Communications is in-charge of ICT, but MLIT, METI and other ministries have larger offices and more in their ministerial portfolio. MIAC has a smaller staff, and is engaged in bilateral, multilateral, and global relationship in the ICT area. MIAC focuses on Africa, Central Asia, Southwest Asia, China and South Korea.

The wide-ranging district regional coverage gives opportunities to contact people of various countries and regions. After being appointed to his current position, Mr. Kaneko went to Rwanda, Africa, to attend the *Transform Africa Summit* hosted by African Foundation, where he witnessed the strength and energy of Africa and the potential for future growth and changes.

Mr. Kaneko stated that he was looking forward to learn more from other panelists' feedbacks, which can then be reflected in the office's policymaking.

Satoshi Akita
CEO, Digital Grid Inc.

Mr. Akita stated that although the company's name is Digital Grid, the brand name is WASSHA. DGI does business in Tanzania and Senegal in the off-grid areas where there is no power. Africa has lots of such regions. In West Africa, it is called boutique or kiosks. There are lots of these in the off-grid areas.

DGI partners with these shops to provide the necessary services to the local people. More specifically, DGI works with the kiosk owners, who buy power when they have extra money or funds. DGI installs solar panels. The kiosk owners purchase the solar panels when they have extra money and provide mobile telephone charging services or lighting services to the local people.

The world market size for replacing kerosene lanterns, which are used as a source of light, with LED is approximately US $12 billion. WASSHA plans to create electricity in off-grid areas by co-operating with kiosks, which each town has. WASSHA provides all devices necessary for initial installation. The kiosk owner purchase electricity in advance through mobile money and download electricity to the smartphone that acts as a controller.

From here, the kiosk owner lends out devices such as LED lanterns and offers charging services for USB devices. All transactions are remotely monitored under WASSHA's dashboard. Going forward, WASSHA plans to expand their range of services to provide a whole new experience for people in off-grid areas and illuminate areas without electricity with the vision of bringing power to the people.

David Nkoto Emané
General Manager, Cameroon Telecommunications Corporation (Camtel)

Mr. David stated that ICT is a major leverage to promote growth, including in Cameroon. ICT is socially, economically and politically essential for African countries. Cameroon has spent nearly $1 billion to realize internet connection for the last 3 years. There are several infrastructure projects, particularly in backbone development.

All large cities of Cameroon are connected with 12,000 kilometers connection. Cameroon operates at three locations. The most important construction project is where Africa is connected with South America across the Atlantic Ocean with 6000 kilometers connection. In Brazil, from Kribi to Fortaleza connections need to improve. With improved connection, availability and service quality will improve. Through such efforts, development can be promoted to Cameroon, Chad and Central Africa, although it is a challenge.

Through this forum, Camtel hopes to face important issues like Project Finance.

Didier Nkurikiyimfura
Smart Africa, Head of Technology and Innovation, Secretariat

Mr. Didier stated that Smart Africa, which is a new initiative that started just less than 4 years ago with several leaders working together, to unlock the ICT sector's potential with the aim to transform the continent and create jobs.

Africa has 54 countries. The African map has countries delineated by their borders. Today, Africa is a market of over 1 billion people. When one looks at individual countries, there are small, medium and large economies. Although there is an attempt for original blocs like Eastern, Southern, Northern, Western, and Central Africa to work together, Smart Africa vision actually leverages the entire continent's potential to transform Africa into a single digital market.

This commitment was formulated 4 years ago in Kigali. In Rwanda, President Paul Kagame hosted the seven Head of States, who decided to work together and renew focus on the ICT sector with bold strategies and policies. Everything starts with commitment from countries to transform themselves, the economies and the societies.

They also decided to work with the private sector. Traditionally, governments have been quite aggressive but cannot spur the economic development as it is driven by the private sector. They had a strong commitment to work with the private sector, to put them first and collaborate with them. The idea is to harmonize, where possible, legal policy and regulatory frameworks to enhance the outlook of the African market, but also aggregate the demand. With over 1 billion market size, the ultimate goal is to attract large scale economic growth and job creation in Africa.

This is a first of its kind commitment where the Heads of State, organizational boards, private sector companies, international organizations, and the African Development Bank meet twice a year to assess the progress of the commitment made 4 years ago.

They think together to turn this dream into reality with the belief and trust to do something long lasting for the continent. This is supported by Steering Committee of ministers of ICT of respective countries. At the operational level, the Secretariat is headed by Dr. Hamadoun Touré, former Secretary General of ITO.

Although it started with 7 countries, today there are 22 countries. The market of over 560 million people is led at the top level by respective states. More and more countries are joining this alliance. Just over a year, close to 15 private sector companies joined. Entrepreneurs and startups have also joined.

With international organizations, African Development Bank, African Union, and founding members like ITU and NEPAD, the aim is to work at entry as well as advanced level to join forces to turn this dream into a reality. More and more academia is also being involved because one of the objectives is to create the right skills for the 21st century.

In a nutshell, Africa has lots of opportunities of investment in infrastructure, fiber optic, broadband, data centers, satellite, cyber security, smart cities and villages. This message needs to be conveyed at the Japan-Africa Business Forum.

It means business beyond infrastructure, content and applications. The Japanese companies need to be told that there is a renewed commitment from the leaders to see this transformation and deliver a better future for Africa. This is the relationship that is being strived to establish.

In a nutshell, Smart Africa represents the commitment of several governments about transformation of Africa using technology.

Samir Lamrissi
Vice President of Strategy, HPS

Mr. Samir stated that HPS is a Morocco-based company and also an example of an African company that developed an expertise in a field where it was unusual to find an African company exporting such know-how. HPS specialized in electronic payment transactions, providing banks and financial institutions solutions with a possibility where the customer can pay with cards, like Visa, Mastercard, American Express, China UnionPay, and so on.

HPS started 22 years ago and Africa was its first market. HPS developed a solution for this in Africa. It started in Morocco as the Moroccan market was demanding. The Moroccan merchants wanted their banks to provide the infrastructure to be able to pay with cards. HPS developed an expertise with some partnerships in France, in Europe. After sometime, HPS managed to provide a comprehensive product that was exported in more than 85 countries in the world in the span of 22 years.

In the beginning, the solution could not be sold in Morocco as the Moroccan people did not trust a Moroccan solution. Today, the expertise is accepted and trusted by Japanese corporations, like the Shinsei Bank and Dai Nippon Printing, DNP.

Last month, HPS launched with DNP one of the first Apple Pay transaction in Japan. This is not known to the public because as it serves a very specific niche. This shows that solutions can be developed in Africa and the expertise can be exported. The Nippon Printing Company's Chairman said that it was the first time that the bank had bought a non-Japanese technology solution. It is an honor for HPS that Japan has trusted Morocco. This example shows that a solution can be developed in Africa and the talents can be exported abroad.

Today, HPS is not a very big company. It has 450 people and engineers based in Casablanca, with offices in Dubai, Paris, Aix-en-Provence, and Singapore. To be where HPS is today was a challenge. When HPS started as a business, they had to provide solutions to some African countries. HPS is about in 40 countries in West Africa.

HPS launched very structured and important projects in Africa. HPS faced challenges in these countries as making a transaction with a card was not easy. At the beginning, electronic payment transactions were done in an offline mode with a printer at the ZipZap.

The challenge that HPS faced in Africa is that some places did not have good telecommunications. Some possibility had to be found and created for the merchant to be able to make offline and not online transaction. These offline transactions are more complicated and need some intelligence sometimes in the terminal with a stop list.

HPS solution is very creative and innovative, whereas in countries like the US or Europe with already existing good telecommunication, the transactions were very simple with online payments being made on terminals. The stop list and everything else is controlled online. HPS solution was developed in a very creative, robust and mature way when it was complicated to develop these solutions in Africa, in West Africa, with no infrastructure. This enabled HPS to develop an expertise that was then sold to US and Europe.

Today, HPS sells its solution to American Express, which is an American company, in the Middle East. American Express is a leader in the electronic payments and was looking for a single platform solution that would respond to all the value chain of transactions, from issuing and accepting the card, from controlling the fraud, corporate and credit. They could not find such a solution in the world. They looked at HPS solution, which was not easily visible. They started using HPS solution and are proud to use the technology.

This shows that solutions can be developed in Africa and then be exported all over the world, especially at a time where digital revolution is impacting all the sectors.

Mr. Kapoor asked *Mr. Kaneko* to comment on Japanese perspective of opportunities for investment from digital security to other telecommunication systems as Japan has a lot of experience in these areas. How can the Government of Japan help promote such investments in Africa and how can it better support initiatives like Smart Africa?

Kenji Kaneko stated that it was difficult for him to say anything on behalf of the Japanese government. He introduced some initiatives under the Ministry of Internal Affairs and Communications. MIAC is not specifically focusing on Africa to promote investment with dedicated plans. MIAC through a program wants to contribute to the problem solving for socioeconomic development.

A few examples: Firstly, in Rwanda, there is the ICT Factor International Strategic Plan. In Rwanda, JICA is doing the Innovation Ecosystem Project for industrial facilitation and human resources development by using ICT. This initiative is taking place in Rwanda, with the possibility to

expand to other African countries. The MIAC is supporting this JICA-led program.

In Botswana, the Japanese format has been introduced for terrestrial digital broadcasting. The use of ICT is being sought to boost by collaborating with the local and central government and International Telecommunications Union, ITU, and International Organization. The ITU, with WHO's support and under ICT's front, worked together to jointly develop responses to the Ebola hemorrhagic fever outbreak targeting Western Africa.

Infrastructure development is not necessarily prioritized on least expensive price. If it is expensive or if the quality is high, it will lead to improved quality of life of people. Guidelines are being created for quality ICT infrastructure. The importance of making use of ICT is being communicated and advocated.

Mr. Kapoor asked *Mr. Satoshi*, if ICT was a magic bullet as many people looked at ICT solutions as a way to resolve issues in a lot of different sectors?

Satoshi Akita stated that the ICT technology was important in doing businesses in Africa or elsewhere in the world. For an entrepreneur doing business, it is not so much about technology as about getting to know the customer. For example, ICT enables people to communicate with each other using Skype in the off-grid areas. People can chat, take photographs and videos and share it with the engineers.

To understand a place well, one needs to get on the ground to actually see how people lead their lives, the air they breathe, the atmosphere they live in and how it smells and sounds. Otherwise, it is difficult to come up with things and services that people need. Although ICT is an important element to realize these goals, it is dangerous to put ICT at the center of the business.

As a starting point, everything looks like a nail to a hammer. Technology does not come first. People's needs should be looked first. To cater to these needs, the available technology, knowledge and know-how need to fit in accordance with the needs.

Mr. Kapoor asked *Mr. David* to comment on how Cameroon was financing the submarine cable being laid between Brazil and Cameroon as it was pretty expensive and how will the future developments in this area be financed?

David Nkoto Emané stated that financing was becoming a very important issue and there are many reasons for that. A digital divide exists between developed and developing countries and it should be avoided as it could lead to a more serious situation.

Particularly, a digital divide within one country can lead to serious problems. In most African countries, many people live in the rural areas.

In Cameroon, 60% of the population lives in the rural areas and 40% in the urban areas. Funding is not necessarily sufficient, as it is difficult to provide funding to both urban and rural areas which leads to serious problems.

Secondly, major telecommunication companies like Facebook, Google and Amazon benefit and earn profit using African telecommunication networks. As these companies work from outside of Africa, they cannot be taxed. The bilateral or multilateral relationships should be used through developed nations like Japan. Through bilateral relations, bilateral relationships should be availed. In Angola's case, cables will be laid and even if there are bilateral relations, it is possible to get funding by using local commercial banks in some cases.

A mechanism needs to be thought of for large companies like Amazon which will urge them to participate in the future infrastructure development. Telecommunications operators must invest in high-quality infrastructure in the future to increase their profits.

Camtel worked together with the Cameroon government. For the cable to be laid between Cameroon and Brazil, a business plan was made to get finances. Technological issues were also handled. By working with Brazil, it is possible to shorten the delay and access the United States with more speed.

On the other hand, the African and the South American continents have similar cultures and ecological systems. There are many commonalities among these continents. Through the submarine cable, the two continents can come closer and promote mutual development.

In terms of technology, the digital divide must be avoided within one country. In Cameroon's case, it is expensive to lay optical fibers in rural areas. Satellites are used to carry out the ongoing projects. There are many developments in this sector. In the 1990s, satellites were at a height of 3600 kilometers, so there was a 500 millisecond delay, which shortened the latency. Today, with the satellites being at 8000 kilometers, there is 50 milliseconds latency. Technology has great advanced. The quality of internet has advanced in Cameroon.

Around 3 billion people world over are still not yet connected to the internet. Camtel wants to contribute for their connection and is going to start a project in September. With low-cost communication satellites, the rural areas can be connected to the internet.

In conclusion, to avoid a digital divide between developed and developing countries, deepening of the digital divide should be avoided within a country. To do this, funding is necessary. The rural areas were affected by the lack of funding. Camtel hopes to follow the African Development Bank and the large telecommunication operators having large revenue in supporting the development of the infrastructure.

Mr. Kapoor asked *Mr. Didier* how the Smart Africa platform can solve the challenge of creating jobs for young people coming to the continent and how can investment be attracted using this platform.

Didier Nkurikiyimfura stated that Africa is truly one of the most youthful continents. The average age of the population in the Republic of Niger is 15 years old. This is a continent with a very strong and young population with a lot of potential.

Today, one of the main challenges that many leaders face is how to create jobs and prevent young people from crossing the Mediterranean. Most of the elected leaders promise to create jobs. ICT is one potential sector where jobs can be created, but it is difficult to lock innovation.

The human brain is the only natural resource, which is evenly distributed to everyone. People's dreams cannot be locked as they want a better future. Smart Africa's ultimate goal is to create jobs, give new opportunities by supporting and creating the right framework, the right environment to support the creation of ecosystems that will unlock the potential of the youth.

This is what the leaders and the Heads of State are trying to achieve in the different initiatives or areas of investment. Investment in infrastructure creates employment for people from digging the ground to technology transfer on the engineering side. Other subsidiary businesses will be created around selling the broadband to the people, just like people on the street selling scratch cards or broadbands in the shops. This is an example on telecommunication.

Regardless of the sector, be it smart energy or something else, companies like WASSHA are working with a lot of companies that work as distributors or resellers. There are a lot of opportunities. The key message is a lot cooperation effort is being done with many countries, including Japan. This work of going together with the government and supporting the government in reducing poverty is highly appreciated. Wealth creation and partnership, which can be done together, are being talked about rather than poverty reduction.

People from government, private sector and different organizations should join hands and create the environment for adequate for job creation.

Africa is among the few places in the world where one can still get a high return of investment. Africa is a market of 1 billion people. In Africa, the device market alone is close to over $100 billion, and this does not include other sectors. Over 750 million people own a mobile device today and every 1 or 2 years they have to renew or buy a new device because the device is either obsolete or broken.

This initiative will definitely create opportunities, jobs, and also unlock innovation, because mobility has opened new avenues for innovation, especially from the youth.

Mr. Kapoor invited *Mr. Samir* to comment on whether digitalization will result in job creation or job loss. He reflected on a speech of an Indian Transport Minister, who said that they would not allow driverless vehicles in India as it would lead to loss of 2.2 million jobs. On one hand, salaries are high in the west, so automation can bring in a lot of savings. In the developing world, salaries are not that high and automation can actually result in job loss. There is a lot of debate on how this digital revolution can contribute towards development on the continent.

Samir Lamrissi stated that the world is going through a digital revolution and it is a very special moment. This digital revolution has eliminated all the frontiers. With the ICT, one can do a transaction, communicate with Skype, and use all these new tools without any problem. This is changing behaviors and business models. Some companies are threatened by newcomers, like Airbnb, which is the biggest hotel provider in the world that does not own a single room, or Uber, which is the biggest car rental in the world but does not own a single car.

Just by having some value-added services, one can really do things that are very interesting. These things are going to be changing. New businesses will be created by this digital revolution. Africa's demography can be also an important opportunity. In 2030, Africa will have more than 1 billion mobile users. From this perspective, the digitalization will reach all people. HPS is ready also to help in the area of payment so that financial inclusion will help everyone's inclusion in the society.

In this perspective, all the governments in Africa should integrate in their development strategies to realize the digital revolution concept. Education and training is also vital for this digital revolution. Very importantly, the average population represented by a very high consumer number will boost the growth of different economies but really put training and education at the heart of the government's strategies. As a wise man once said, if there is someone who needs help, do not give him fish, but teach him how to fish and to make sushis also.

Dr. Kapil Kapoor summed up the talks by saying that there are many different schools of thought. Clearly, ICT is an opportunity and if not managed well can become a threat. Training should be at the heart of what governments do, particularly in Africa, where the population is young people, who are seeking jobs and entering into a brave new and a different world.

He opened up the floor for Q&A with the thought: Is ICT an opportunity or a challenge.

Estifanos Afeworki, Ambassador of Eritrea, stated that Africa's biggest challenge is interconnectivity, which has been a problem for a long time. Japan has at times played a role to mitigate this problem. To make a telephone call from Eritrea to Nigeria, it has to pass through the British Telecom.

Most of African countries' interconnectivity is through Europe at present. Several attempts have already been made in this regard. The Pan-African Telecommunication – PANAFTEL – microwave links connects all African countries from Alexandria to the Cape of Good Hope. In the 1960s, African leaders put this project in place. Japan had played a big role at that time. Investment was made. There was some success of establishing connectivity in Africa.

The second phase was the satellite connection project, which is RASCOM, which did not succeed. The 90s' project about highways was the ICT which is the information age. The 90s' Lucent Technologies and others proposed the *Africa One* connection, which interconnects every African country through the loop going around Africa, connected through the submarine links.

These projects have not succeeded which led to failure to integrate of the 2 billion people market. The biggest challenge now is to interconnect the regional countries or the localities in Africa.

The Ministry of Communication is a very important component. The issue of interconnectivity through satellite, submarine, microwave links or other factors is a big challenge in Africa for any kind of technology cycle that needs to be introduced. Segmenting the African continent into different components will not solve the problem as it will not be sustainable in the region.

Henry Mussa, former Minister of Labor for Malawi, stated that 3 weeks ago at the International Labor Organization Convention in Geneva, he attended a forum on digital skills which targeted to create 5 million jobs in digital skills by 2030. What is lacking now is to join the campaign and link Africa with the advanced countries like Japan and others that are highly conversant in these technologies. This opportunity needs to be embraced sooner rather than later.

Courage Kamusoko, from Asia Air Survey, stated that one of the biggest challenges in most African countries is the lack of geospatial data or lack of digital maps for planning purposes. Smart Initiative Africa talks about smart cities. Without detailed maps, one cannot actually plan for smart cities. Is there any provision to include geospatial data in some of these initiatives?

In this regard, JICA has done a lot of work by supporting some African governments in providing funding for detailed mapping. To continue doing this, there needs to be support from private sectors and other stakeholders. Is there any input in this regard?

Female Participant, from Zambia, stated that there was a comment made by an entrepreneur from Japan which was very important in regards to the ICTs, which themselves should not be the driver, but an enabler. They must always enable whatever needs or demands need to be met, because this is how more challenges and problems will be found in trying to move the digitalization forward.

Secondly, going forward, one of the challenges related to ICTs is the infrastructure cost, which is very high right now. How can the cost of ICT infrastructure be brought down, whether in a soft or a hard way, because this is very critical going forward as it needs to be ensured that Africa is part of the digitalization.

Robert Ford, Vice President – ICT Chamber, Rwanda, stated that it was nice to get in a discussion, which talks about a continent that has immense potential through its youth but fails to address the issue of different countries on the continent not putting enough effort to create the ICT ecosystem that helps innovation to take root. When one talks about Africa, one talks about the youth. But little is being done to create an environment or an ecosystem where knowledge labs and fab labs can exist and tap the youth talent.

What can be done to have an integrated structure through which different African countries, and probably Smart Africa, will come to that and answer that as they have a more continental approach to address some of these issues. What system or structure is in place to make sure that African countries tap the talent by creating the necessary ecosystem to have the young talents come through onboard and innovate?

Secondly, the issue of infrastructure can be easily addressed if regional blocs, African countries address the shared infrastructure strategy, which has been working very well in East Africa, through different frameworks like the Northern Corridor Integration Projects or like the ONA or One Network Area framework where different countries like Kenya, Uganda, Rwanda, and Republic of South Sudan have created a One Network Area where citizens can move from one country to another without going through roaming charges. This infrastructure sharing could bring the costs down and make the communication on ICT easily accessible.

Mr. Yamanaka, Professor at Kobe University, stated that for the last 7 years, he had been involved with ICT development in Africa. He has talked to Japanese companies on many occasions about ICT opportunities in Africa. Large companies do not have a particular image about ICT in Africa. Some view Africa as an area of conflicts. Others think about elephants and giraffes, when they think about Africa. Some say that Asia or perhaps India can understand it better.

The concept of Africa is gradually changing through such forums. Having said so, Japanese companies cannot imagine about ICT opportunities in Africa. In particular, Mr. Akita and Mr. Kaneko are in the position to provide the right message to the Japanese public on how to resolve this problem and promote the right image about Africa in Japan. What can be done to help the Japanese companies understand about the innovation and ICT opportunities that exist in Africa?

Dr. Kapil Kapoor stated that *Mr. Akita*, who was an entrepreneur doing business, could answer the question of how the perception of Japanese businesses to do business across the continent can be changed.

Male Participant, *Daura Abulama*, of ABE Initiative from Nigeria, stated that he wanted to ask a question on infrastructure to a government official on the panel. He said that he was aware India took some time to brand its country as a one-stop shop for information technology by putting in place a structure to change their youths in the field of information technology. Today, if the world talks about IT, they talk about India.

In Africa, a lot of young graduates struggle in the field of information technology. Being a player in the information technology field, paperless software was developed in Abuja Clinics for the international development agencies that have been to Nigeria. In Abuja Clinics, a doctor consultation is done without any paper. A system administrator and a system analyst developed the software program, which is NHIS compliant, and works perfectly.

In Africa, most countries do not have laws to facilitate ICTs. Investment for the broadbands is not there, as the cost of running ICT facilities is very expensive in Africa. Maybe the Japanese government or industry needs to come and invest in infrastructure by using the local materials and local people in Africa. This will reduce prices of things because this is what China is doing.

Yongama Majibi, from the Republic of South Africa, asked on the accessibility and affordability of ICT and how can the government create that environment. The public-private partnership sector needs to get into this space and develop telecommunication networks to make this data more affordable and accessible for the poorest of people in the rural areas, in times of smartphones and smart cities.

Dr. Kapil Kapoor invited the panelists to answer the questions.

Kenji Kaneko commented on the infrastructure cost. There are differences between countries and even within the same country, difference between cities and rural areas.

Everyone knows about ICT's potential. Rather than speaking in general, each stakeholder should think what could be done in a specific area of Africa. The most important major principle is investment promotion from private sector will reduce poverty and may uplift the quality of people's life.

In that context, infrastructure cost is an issue. In Africa, integration is progressing. One general macro idea is to embed ICT into infrastructure development right from the planning stage, region by region, along with infrastructure development.

In terms of infrastructure development, human resources development is important. One of Japan's strengths is its ability to contribute to human resources development. The Ministry in collaboration with JICA and other organizations will require a longer-time horizon to launch one or two initiatives to foster human resources.

Japanese companies wanting to enter Africa have little understanding of various African regions. An event on ICT-Focused Infrastructure Development is being planned in coordination with the relevant stakeholders and the African Development Bank in Tokyo around fall of this year. By next year, there is a plan to send a Japanese business delegation to Africa.

Importantly, Africa should not be viewed as one area but one with wider diversity on the same continent. The mission is to communicate this difference.

Satoshi Akita stated that when it comes to tie-ups, Japanese businesses are either slow to respond or give a cold shoulder. It is hard to change people. When people are not interested, it is difficult to bring them to Africa. People, who are interested in doing business in Africa, will do it anyway. Such people are wanted as much as possible. Companies that feel that they were late in realizing Africa's potential and do not want to catch up now should be left alone.

Secondly, cost is indeed an issue, especially in examples where hardware is being manufactured in China and software is being partially developed on Vietnamese offshore. The Japan-Africa Business Forum is not just between Japan and Africa, but most importantly, the business should cater to user needs.

It is not necessary to keep it between the two countries. Manufacturing is cheaper in China. The quality of some products is better in China than in Japan, so it would be best to manufacture in China. Software development need not necessarily be done in Japan, and countries engaging in offshore development like Vietnam or Rwanda can be leveraged.

Technology seeds are not only born in Japan but also in places like Silicon Valley and Europe. The different technologies with the distinctive features of different countries can be used to solve problems related to social issues in Africa or cater to different needs in Africa. The biggest challenge is to mix these to turn them into business.

David Nkoto Emané stated that connectivity in Africa is a question. Some initiatives are conducted at the sub-regional level. In Western Africa, efforts are being taken to harmonize the centralized regulations. The network is integrated. The management rules should also be harmonized to the regulations. The African Development Bank is supporting a project in Central Africa to connect different countries with the same network.

With regards to the development of younger generations, although talented, some are not able to express themselves. In Cameroon's case, the following is being done. With one tool or one system, like the Technopolis, which is based in Europe, which is training and maintenance center with researchers, everything needs to be integrated into one location in Africa because all the goods to be consumed in Africa are

manufactured in Europe, but Africa's ecosystem is different from that of Europe.

Africa needs a lab, which at that location would have seeds, incubators and a million people who would get support from the incubators. The young people will start up companies in the future. Infrastructure is not the only problem in Africa, the issue of contents is another major issue as it is sometimes difficult to acquire information about Africa.

There is a shortage of infrastructure in cases where there is lack of interest in the subject on the government side. Africa will grow rapidly if it is provided with proper content. In this regard, experience of younger generation is important.

In Cameroon schools, from young ages there is ICT education provided. In the private as well as the government sector, there are people in-charge of ICT. There are schools teaching ICT. With Africa's education level, the Japanese people will be satisfied with the level of education, although the infrastructure requires proper maintenance. There should be people, who are skilled to carry out the maintenance or else the service level will deteriorate.

Japan has expanded the possibility where Japanese people are helping to develop Africa's younger generation.

Didier Nkurikiyimfura stated Africa is quite unique because of its massive land size. A lot of efforts have already been made in installing submarine cable around the continent. Some countries have national backbones that have been put in place and also private investment.

But one looks at the opportunities, they are actually very big, because a lot of parts in the cities are still not connected. There are countries, which still solely rely on satellite for internet connectivity by paying $2500 per megabit. Rwanda, 10 years ago, put the national backbone connected to the submarine cable. The price went from $2500 to less than $100 per megabit. This is the kind of the opportunity that exists and the Japanese companies should take a note of this.

Chinese companies like Huawei, China Mobile, and a lot of other companies are coming to put this infrastructure. Korea Telecom, which is a Korean company, also exists in this area. Although there are some efforts, they are not really substantial yet. Hopefully, Japan would not miss the train to see these opportunities being taken away by other countries. Smart Africa calls upon its friends from the private sector in Japan to come and invest in Africa as there is an interest for partnership in Africa.

This is indeed very important and part of the big agenda, because without this it is difficult to actually make proper planning.

Creating an ecosystem takes a lot of time and effort. Although the focus is on the youth, to create the innovation and innovation ecosystem takes

different components that need to come together. In this regard, they need to be brought together in co-working spaces, where they can share ideas and have access to specific services that are given to startups. Companies that do not have the right financial ability can establish themselves with basic services like legal advice, marketing, support, small trainings that can help them to go to the next level.

Funding is very important at the various levels of the company right from seed stage to series A, B and also the angel investment before. Intellectual protection and property protection is a big challenge in Africa. In this regard, there are a lot of ideas and innovation, but the moment it actually starts to get out, there are people who get it.

There are a lot of examples, like the M-Pesa, which is a tremendous success, but there has been a lot of discussion about the intellectual property because it was not benefiting the person who actually invented it. This is an example of an idea that was invented in Kenya, but the company reaping benefits out of it is a company in the UK.

Although there are a lot of different components, the ultimate reason for being here is to say that something needs to be worked on together with a wide range of stakeholders.

He invited people wanting to get more information about what is happening in Africa, in additional sessions on Rwanda, Smart Africa and a regional session for East Africa.

Samir Lamrissi stated that he wanted to effectively talk about the ICT problem and the digital revolution. Africa is a big continent and a lot of countries are doing some initiatives. If all these initiatives and countries could cooperate or build some partnership, it would be really good.

African has some political and some economical bodies that are existing. It would be good to have some ICT or a think-tank or some council built by African countries that would bring some ideas. Some countries could capitalize on what is being done in other countries, because some countries like Kenya have interesting projects like M-Pesa and Safaricom in which they are the leader. It could not be replicated in other countries as the specificities of each country differ and it cannot just be a copy-paste experience. This helps in capitalizing and economizing and avoiding wastage of money. A lot of initiatives are launched without looking at what has been done in other countries.

This forum has a lot of Head of States, governors, and ministers that would be very interested in what is being done in Africa. It would be good to have a link of a council that would give ideas, recommendations, and trends. This will help save a lot of time of people.

Ecosystem and fab labs are something new. In this regard, HPS has done what is called the hackathon, which is an event of 48 hours. It gathered 100 young people from universities and companies. During the 48 hours, they thought about creating an idea, a product, and an application. At the

end of it, the three best ideas were rewarded. HPS has also contributed some funds towards this reward. The African Development Bank can also help link these partnerships. The African Bank can help by putting a little bit of oil on these procedures. This topic cannot only create infrastructure, but also help the younger generation to come up bright ideas that could help.

Dr. Kapil Kapoor thanked the panelists and concluded the session.

Closing Session

Dr. Jennifer Blanke
Vice President
In-Charge of Agriculture, Human and Social Development
African Development Bank

Ms. Blanke announced the new Human Resources Development Program by the African Development Bank. With the fund provided to trust fund from the Japanese government to the African Development Bank, the Joint Japan-Africa Sustainable Development Scholarship Program, JJASDSP, will be launched.

She thanked everyone for being in Tokyo for the exciting Japan-Africa Summit. She thanked the Government of Japan for its commitments to specifically enhance higher education, which underpins everything else because if people are not well trained, then it is hard to imagine that they would be able to help the continent to develop. The government's efforts have promoted knowledge creation and exchange in sharing between Africa and Asia and support of Africa's sustainable development.

It is a great honor to discuss a new initiative called the Joint Japan-Africa Sustainable Development Scholarship Program, JJASDSP, which is really capacity building for African youth in the area of energy sector to light up and power Africa. For this to happen, well-trained young Africans and Africans, in general, will be required.

The JJASDSP, funded by the Government of Japan, will support African youth with higher education programs, which will be mostly provided in Japanese universities, particularly in the energy sector. Following the completion of their study in Japan, African scholars will return to their home countries as future leaders of Africa's industrialization process to light up and power the region through their active contribution.

Today, Africa has nearly 722 million children and young people representing 60% of its total population. The number of young people is expected to grow to about 1 billion by 2015. This will unleash a powerful demographic dividend. If built on well-educated skills and a productive workforce, Africa would become a town pool ready to reap huge economic benefits and benefit the world. For this to happen, it will be critical to invest in education, improve labor productivity and job creation.

Over the past 15 years, Africa has made significant progress in expanding education opportunities, which is evident in the numbers. The continent has halved the number of primary school children out of school. The number has also significantly increased in roman, secondary and higher education, particularly secondary but also tertiary.

While the number of students in technical and vocational educational training for on-the-job necessities has increased by about 24% since 2000, the adult literacy rate has significantly increased by about 8 percentage points. Gender equity in access to education has also increased, as it is important for inclusive growth.

Despite these gains, Africa still lags in many ways. For the most part, the education systems are preparing young people for the jobs of yesterday rather than for the jobs of tomorrow. This is not only Africa's problem but is something that countries around the world like the United States, Canada, Europe and many others are facing. Therefore, Japanese support to higher education enhancement in the framework of this scholarship is critical.

Today, the world is entering the age of the fourth industrial revolution. Focus has shifted towards digitization, material sciences, biotechnology, artificial intelligence and robotics among others. Future work environments will integrate people and machines and not people and people. Skills in the energy sector, sciences and engineering, mathematics, and computer sciences will become the drivers of the jobs of tomorrow.

The current state of education in Africa, especially at the higher education level, is insufficient to meet the future challenges of African development. The African education needs to be fundamentally transformed to provide a central place to science, technology, innovation and research. These are areas of major focus for AfDB and why those scholarships supported by Japan are so critical.

AfDB would like to express sincere gratitude to the Government of Japan for the support it provides to African higher education and to the Sustainable Development Scholarship Program, the JJASDSP. The initiative will be fully operational as of April of2018, allowing promising students to study in Japan and also supporting Japanese technical experts from the energy sector to visit Africa. Partnering with Japan is a key to addressing major bottlenecks being faced by higher education for more robust and sustainable development in Africa and this an excellent example of why.

Closing Remarks

Charles Boamah
Senior Vice President, African Development Bank

Mr. Boamah thanked all the participants at the forum. Insightful comments and questions by speakers, moderators and panelists have enriched the discussions.

He expressed his gratitude for coordination, co-organization and support towards the African Diplomatic Corps, JICA, JETRO, UNIDO and the Asia Representation Office of African Development Bank led by Tadashi Yokoyama and colleagues.

He thanked the interpreters for doing a fabulous job in making people understand each other and facilitating the conversations.

Yesterday and today, key personalities from the public and private sectors in Japan and many African countries and other countries spoke and shared their ideas and insights. Japanese and African businesses got to know each other better. This has led to a greater appreciation that indeed the opportunities that exist far outweigh the perceived risks for doing business in Africa.

Hopefully, this will carry forward in the form of increased business volume. The word *business* in the Japan-Africa Business Forum is not by accident as there is a big focus on it that states that Africa is open for business.

The role of the private sector has been highlighted which was also clear during the TICAD VI discussions. It is very central of the High Fives agenda of the Africa Development Bank and needs to be carried forward.

Even though this is the closing session, this by no means is over. This afternoon, there will be five African regional thematic sessions on the promotion of SMEs, business-to-business partnerships where the discussions will continue. There are many other seminar discussions taking place this afternoon which would be just as enriching as well, so it would be worthwhile to participate in those sessions.

On behalf of President Adesina and President of the African Development Bank, Mr. Boamah thanked everyone for making the Second Japan-Africa Business Forum a success.

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His Excellency
Estifanos Afeworki Haile
Ambassador Extraordinary and Plenipotentiary
Embassy of the State of Eritrea
Dean – African Diplomatic Corps in Japan

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Mr. Estifanos, in his capacity as the Dean of the Diplomatic Corps and the Ambassador of the State of Eritrea to Japan, expressed his heartfelt gratitude to all the distinguished guests and participants, who attended the *Second Africa-Japan Business Forum 2017*.

He took the opportunity to congratulate the ADCs, Trade and Investment Committee and the External Representative Office for Asia, African Development Bank, Chairperson, His Excellency, Mr. Vahekeni,

Ambassador of the Republic of Angola, and the Head, Yokohama, the moderators, distinguished keynote speakers, panelists, and all the participants who contributed effectively and made this event a success.

He specially thanked the government and business community of Japan. He congratulated the ADC, the African Development Bank, Tokyo, for their wonderful arrangements and preparations for the success of this forum. Of course, the vibrant vibration in the conference, where everyone was given the opportunity to convey constructive viewpoints representing the mutual business strategic needs, priorities, interests of Japan and African countries, especially at this point of time was a very historic moment.

This forum has been a great opportunity to enhance everyone's knowledge about business and also tap opportunities in Africa and Japan, as already covered in the forum.

He took this opportunity to convey special thanks to JICA, JETRO, and all the supporting organizations, like the Ministry of Finance, Ministry of Foreign Affairs, Ministry of Economy, Trade Industry, Ministry of Agriculture, Forestry, and Fisheries, *Keidanren*, *Keizai Daikoukai*, JOGMEC, JBIC, World Bank Group, the Africa Society of Japan, UNIDO Office, Tokyo, UNDP World Bank, Association of African Economy and Development of Japan, Alliance Forum Foundation, Africa Business Promotion Support Network for contributing to the successful conduct of this forum.

Finally, he thanked all the personnel, who worked behind the scenes for the success of the *Second Japan-Africa Business Forum* and wished every participant a very *bon voyage* to their destination. The African Diplomatic Corps in Tokyo and the African Development Bank shall work hand in hand in their continued engagements to empower Africa and Japan with business opportunities.