

# The Youth Behind Rwanda's ICT Sector

Young people in their late twenties and early thirties are distinguishing themselves as entrepreneurs and lynchpins in Rwanda's ICT industry. Using the experience gained in Japan through JICA's programs, these people are working hard to solve problems in their country.

## Contactless Cards for Bus Fares

Christa Munezero (27)



**B**elongs to AC group, the developer of the "Tap&Go" smart card system (contactless ic card). The system is installed in all of the buses of the three companies operating in Kigali City, and is used by roughly 300,000 people every day. The company is rolling out a similar service in Cameroon, and plans to continue expanding throughout Africa.

"It used to be inconvenient because it took time for the bus conductor to calculate people's change, but now people are happy because of Tap&Go. Bus companies are also reporting a 30 percent increase in sales. While I was studying in Japan, I learned about the importance of making plans, holding meetings, and filing reports, and all these skills have now become very useful."



Bus fares can be paid by tapping a contactless smart card against an orange terminal next to the driver.

## An App to Find the Ideal Delivery Company

Yves Cyuzuzo (30) & Charles Mutabazi (30)

**A**fter completing their overseas studies in Japan, Yves and Charles joined WiredIn, an offshore software development\* business established in 2014 by Japanese company Rexvirt Communications. Approximately 10 staff members work at WiredIn's Kigali office, developing software for customers in Japan, Europe, and Rwanda. In December 2018, WiredIn released Ohereza, a mobile app that allows users to hire delivery services. Users enter information about their package and its destination, and choose delivery companies based on price and reviews. If a deal is made, then a courier will arrive to pick up the package.

\*Entails contracting out the development of web systems, mobile apps, and other types of software to foreign companies or subsidiaries.



The app allows users to see shipping prices and check if their package has been delivered. Payments are made with mobile money.



## Building an Online Shopping Platform

Richard Rusa (30)

**D**MM.HeHe: formed in 2017 when Japanese ICT company DMM.com Group acquired HeHe Labs, a Rwandan ICT startup founded in 2010. DMM.HeHe built and operates an online shopping platform that sells food, farm produce, and other daily necessities. They are also involved in nurturing local high school and university students to become ICT entrepreneurs and engineers.

"HeHe" is Kinyarwanda for "where," says Richard Rusa, Head of Technology at DMM.HeHe. "It signifies that we want to answer the questions 'Where can I get it?' and 'Where can I find it?'"



## I'm studying in Japan!

Introducing two budding ICT entrepreneurs studying under the ABE Initiative.

### Materne Ntihemuka

Shibaura Institute of Technology Graduate School of Engineering and Science

"In Rwanda, I was developing systems for banks. I think that Japan is the most industrialized and innovative country in the developed world. In Japan I'm learning to be diligent, studying as hard as I can. I specialize in research about detecting crop diseases with IoT (Internet of Things), and my paper has been featured in two international academic journals. I would like to start my own business one day, and use new ideas and technologies to make the world a better place."



#### Professor's Comment

**Masahiro Inoue, Vice President and Professor, Department of Electronic Information Systems, College of Systems Engineering and Science**

Materne researches IoT. His research covers the agricultural applications of systems combining hardware such as networks and sensors, and software such as AI and machine learning. His paper has twice been featured by international journals. I look forward to seeing his IoT and AI-based contributions and innovations being used to help achieve some of the SDGs.

### Ibrahim Tumukunde

Miyagi University Graduate School of Project Design

"I've felt a bond with Japan since my time learning karate in high school. I'm now studying information design at university and am able to make connections with Japanese companies and researchers by doing internships and attending academic conferences. Talking with them, I felt that they have a deep interest in the African market. My biggest goal is to use the knowledge and skills I've gained to help develop my home country. At the moment I'm coming up with ideas for a post-graduation project in which Japanese and Rwandan companies can cooperate."



Tumukunde (back row, third from left) and his group from Miyagi University were presented the Special Jury Award at the Challenge Japan IoT Awards 2016 for their presentation at the Business Model Discovery & Presentation Tohoku Conference.

#### Professor's Comment

**Hiroki Suguri, Professor Graduate School of Project Design**

Ibrahim's research involves using AI to perform deep text analysis. In his paper, he analyzes opinions about the Rwandan government on social media. I look forward to seeing his future achievements.

## Cooperating with Japan to Solve Social Challenges with ICT

Paula Ingabire, Rwandan Minister of ICT and Innovation

"The Government of Japan, JICA, and Japanese technology companies have been instrumental in supporting and shaping development of the ICT Sector in Rwanda. This partnership started 10 years ago through capacity building and B2B matching to establish the KLab. Through all this, the Japanese community has been committed to our vision of becoming a technology / innovation hub of the continent, and we are extremely grateful for their support and dedication to make our vision a reality. I look forward to deepening and furthering our cooperation with Japan towards co-creating sustainable technology solutions tackling various challenges in our society. With a growing youthful population, we are committed to joining forces with Japan to help our businesses grow and scale to the rest of the continent and globally."

Appointed Minister of ICT and Innovation in October 2018. Minister Ingabire has worked with JICA expert Atsushi Yamanaka to develop ICT sector since her time at the Rwanda Development Board.

