Achieving digital ecosystems in rural Africa remains a challenge

Creating a digital ecosystem in rural areas requires collaboration with local suppliers if long-terr success is to be achieved. This is according to Jeremy Potgieter, regional director: Africa, Eseye, a global IoT cellular connectivity and hardware company.

Jeremy Potgieter, regional director: Africa, Eseye

Potgieter says that for Internet of Things (IoT) to deliver the services required, an understanding of the en consumer within a rural area is vital.

“By speaking to local suppliers to create a tailored cost-effective IoT solution will help us to deliver the mo appropriate service possible. In gaining a better understanding of how they will benefit from IoT technolog vendors such as Eseye can create solutions that meet these needs and make a real difference.”

He says people living in the rural areas of developing countries face a range of challenges that threaten to isolate them from the benefits that are enjoyed by the rest of their populations. Two major examples incluc accessing essential utilities such as water and power, as well as the challenges associated with accessing financial services and payment credit.

“In an urban area, utilities are delivered from a central source. In rural areas however, it’s not quite as simp To achieve sustainable, long-term solutions, these utilities must be delivered locally.”

However, he says that the economics of delivering electricity to small villages of only 50 people for examp make them far more difficult to implement. It is here that with technological developments in areas such as water purification or solar energy, this can be overcome.

“People can then not only enjoy a better quality of life, but these communities are able to source these utilities locally, whether it’s per property or per village.”

IoT has the potential to drastically improve the quality of life for people living in rural areas of developing

countries. Most notably by empowering local entrepreneurs to provide the structures that will allow for vital utilities to be reliably provided to their communities over a longer duration of time. By supplying them with t equipment to generate and store utilities through the process of daily micro-payments for example, a local entrepreneur is given the means and incentive to create opportunities throughout the entire community, thu providing a major boost to local businesses.

“We have seen some great examples of how IoT has transformed the capabilities of these rural areas. W locally generated electricity for example, paving the way for the emergence of phone-charging shops and even stories of people charging entry to their homes to allow visitors to watch major sporting events. The supplier of the equipment is allowed to manage and maintain their assets because of the integration of IoT technology, which provides them with constant performance updates,” says Potgieter.

Get globally connected

Central to the success of any IoT project in a developing country is its ability to be globally connected and highly available. Furthermore, Potgieter says it must be straightforward for non-IoT experts to construct on ground level. At the point of deployment, Eseye can securely and quickly enter a device into the cloud. Th helps locals who are setting up the IoT equipment to easily achieve quick configuration.

“As a result of this approach, Eseye is experiencing some success in developing countries, with life-changing projects through partnerships with suppliers such as SolarNow and eWater.”

Despite these successes, Potgieter says that there are still a few challenges to overcome before IoT can be brought on a mass scale. Firstly, connectivity and coverage lay at the fundamental core of effective IoT solutions. Without it, the entire success of these projects is jeopardised.

Next, it is crucial to ensure that untrained people in these rural areas feel confident setting up equipment. The best way to do this is through ‘zero-touch’ solutions, which allow non-experts to easily deploy devices onto the cloud with automatic configuration. Lastly, there are the logistical challenges associated with operating in rural areas, which can often be difficult to access from city locations.

“We’ve heard stories of our African customers being subjected to 14-hour location visits to certain seclud rural locations. This demonstrates just how important it is for these devices to be truly autonomous. Customers have to be confident enough in the service that they can justify sending somebody to these locations to make any necessary repairs,” says Potgieter.