

2008 50x15 South Africa Partner Summit

Edward Kavish Partner Success Story Transcript



Digital
Inclusion
With a
Deadline

Introduction

Kristin Petersen, Inveneo

Inveneo is a non-profit, social enterprise that's focused on bringing ICTs to people and organizations that need it most in very remote rural areas of the developing world. We are based in the US (San Francisco), the land of technology. Inveneo started by focusing on getting the right types of technology integrated: low-powered computers, low-powered servers, long-distance wireless and different types of software that could work together to address some of the key challenges for organizations that operate in remote rural areas and make that technology sustainable and affordable. We have found along the way that technology is not enough.

While working in various African countries, we realized about a year and a half ago that Inveneo needs to have a way of getting our technology into these rural areas in a way that it isn't all done by us. Everywhere we went we found great technology companies in the urban areas who were working on ICTs for urban situations. We asked, what if we can partner with these organizations and find a way to get them access to all the new technologies that are coming out, technology that is right for rural areas? What if we could give these companies the training and building capacity for their teams to get these technologies out into rural areas in a much more scalable way? We came up with the concept of the "Inveneo Certified ICT Partner Program."

Our goal is to build the human infrastructure to deliver the technology infrastructure. One of the several reasons we do this is because local partners understand the environment, the training issues, the decision making and needs of local companies. Local partners can bring down costs, but they need access to the right types of systems, tools and partnerships so we can jointly achieve Inveneo's goals of getting ICTs into rural communities to make a difference. We have been working on this program for about a year and a half now in about nine countries with local partners across sub-Saharan Africa. Kavishe, who will be presenting today, was our first partner in Tanzania and one of our first partners in the program.

Speaker Presentation

Edward Kavishe, Owner, Kicheko Ltd.

My name is Edward Kavishe and I own a company called Kicheko, which is an ISP [Internet Service Provider] company. We concentrate our business in Kilimanjaro on the outskirts of Mount Kilimanjaro. This region is about the size of Costa Rica, so it's like a small country. Inveneo came to Kicheko and told us they wanted to partner with us. We said yes, although we didn't know how it would develop and what would happen in the course of working with Inveneo; however we have found it to be a win-win situation. Inveneo wins because it's difficult for someone from the outside to break into the market and deal with the bureaucracy, but we could open doors, we knew the terrain. Fortunately I was in government for 16 years at senior level before I retired, so I know a lot about government, how the government works, etc. and through these connections we managed to make things happen much quicker. I don't agree with paying your way around to get things done, because you won't always get the returns. The only way to find a way through is to work with a local partner with an invested business interest, because that interest pushes them to make sure the project happens.

Today, I'm going to talk about four points. First, how did I get involved in this line of business? Second, the challenges Kicheko faces on a daily basis as we try to grow our business. Third, our outlook for the future and lastly, what Kicheko would do differently if we started over?

How did I get involved in this line of business?

First, I had a passion for technology. When I look back at some of the things I did when we first started, I think I was naive because I didn't look at the money, the cash flow or the balance sheet, etc. I was first inspired at a law institute in the US (Washington) when I came across an e-mail that introduced me to ICT. I thought, "I want to be in Tanzania and I want to be the champion of this business."



Second, I had a strong ambition to own a company and I read a lot of success stories about men like William (who spoke earlier), Suzuki, Ford and others. These stories started to create something inside of me and I asked myself what did these men lose from trying? I wanted to specialize in commerce while at school, but the teachers refused and told me I should become an Engineer; however, the desire to own my own business was strong and was inside me for a long time.

Third, a strong will to be uneducated and yet successful in business. There is a strong mindset that people who are educated must be employed and they seem to be more successful when employed by government, resulting in people only being involved in the petty side of business and most of them are uneducated. This was the pattern for many years in Africa up until the seventies. From the eighties this pattern started to change and most of the business people in government broke away and started their own businesses. I thought: this should be built into the education system, rather than people going through the government to business route. Fortunately I've had chances to lecture people at different levels and I always tell them, don't learn to be employed, learn to employ.

Lastly, the freedom to think, plan and implement and the lack of these elements drove me out of government. You know what needs to be done and how it should be done, but you have to convince someone who didn't go to school how it should be done and then you have committees, meetings, red tape and you're trying to convince people who don't think or understand like you. I became very frustrated and thought, wait I have to make my own decisions because once I'm convinced something is right I have to do it and take the responsibility.

What challenges do we face on a daily basis while trying to grow our business?

The first challenge is the legal and regulatory environment (bureaucracy). There are usually a couple of people sitting in an office somewhere who know nothing about business or technology but they are the decision makers and you can't fight them. You won't win fighting the government so instead we should try to include them. What we want is to get our voice heard and we have been allowed to participate in the process of making policy decisions. We have the national business council, the private business forum and different associations for different sectors and now the government listens to the private. They do however, limit our participation at the moment to only those decisions and policies they think will affect business, but in the long term we think even other decisions will affect business, e.g. health care or education, etc. I think this is the way African government should move in trying to involve the private sector in governmental decisions and policies, whether they affect the private sector directly or indirectly.

The second challenge has to do with shorter life cycles of technology and equipment due to the fast pace of technological innovation. We have an extensive network: close to 1,200 customers. We have equipment from 12 different vendors, different technology and different methods of accessing or providing our service to customers; this can become a nightmare. Whenever we try to integrate into a single network, something new comes along and we have to jump ship and move on to that. There seems to be a continuous fight; because at the end of the day, we remain with equipment and solutions at different levels of technology, serving different locations for different purposes and this becomes a challenge.

Third, changing customer tastes and requirements is a challenge. Initially, customers just use Internet and email for casual browsing, but now they also want services like Skype and radio. We as service providers have to live up to the competition and challenges. In the beginning we tried to invest and keep pace, but we came to the point where we realized we can't be everything to everybody. We decided to concentrate on the basics which our customers need; they get good access to the Internet and email from us, but they can get the value added services elsewhere.

The fourth challenge pertains to energy in terms of availability, cost and reliability. When you look at our operational cost budget almost ten percent is eaten up by replacement of equipment because of power fluctuations. We are therefore trying to stabilize the power and moving towards cost-effective, energy-efficient technologies where we can use only solar panels. Now, 75 percent of our network is powered by solar panels. The repeaters, for example, are only powered by solar panels, but on the last mile to the customer they are still using electricity.



The fifth challenge involves spreading our service to rural areas. We have the problem of distance, client mass or customer base to justify the costs, and in some areas the topology requires multiple repeaters and these repeaters should be in places where there is no electricity. The high cost of separate bandwidth at the moment is eating up about seven percent of our input costs. Separate bandwidth is very expensive and unfortunately Tanzania does not have submarine cable like Mauritius. The fact remains that we have to get connectivity to the Internet backbone through satellite. I can throw some figures around, about what we are paying for bulk bandwidth, which is \$2,500 for one megabyte of dedicated bandwidth and that's very expensive. We purchase about ten megabytes every month. This works in that you pay for more speed. The less you pay the slower your Internet connection.

Kicheko's outlook for the future

First, our outlook is good because the usage of computers and the Internet is on the increase. ISP is now becoming a utility company. There are new offices, constructions and areas where people need to work and all of them need Internet access. Initially, we had to go to people and entice them to use the Internet and email; they needed convincing, but eventually they came to us and demanded Internet usage. The requirements became so demanding that we had to put multiple routes in place to get them connected to the Internet.

What I'm trying to say is that now the Internet is moving away from being something for the elite. Everyone wants Internet, even in their homes, and the demand for Internet in homes is bigger than the demand for business because the demand in homes is driven by the children. We are always certain that homes will pay because if they don't pay and we cut them off the children are very upset. The next generation is exposed to the Internet and they understand and use the Internet more than the adults and they learn very quickly. We started to ask, should we ignore this thirst for knowledge, potential and energy that is built in our children haphazardly or should we direct this energy in a manner that will make our economies and countries move to the next stage.

Second, the Inveneo ICT Program helps us to cope with the pace of technology through training, tools and updates. They are always trying to keep us on the cutting edge.

Third, most of the changing customer tastes are temporary and the main demand for stable and reliable service will always remain. Thanks again to the Inveneo ICT Program and AMD, we managed to solve the energy challenge by having low-powered PCs and WIFI systems that can allow us to cost-effectively go into the rural areas and also to save some schools and communities that are budget strung. We have hope for the future and it looks bright.

What would Kicheko do differently if we started over?

First, we would give more thought to planning, network layout and equipment purchased, because of the tools and resources now available from the ICT Program and partnership with Inveneo. We didn't have these tools before and most of the things we did really crudely. Sometimes it took us two days to establish a link, but now we do everything in the office and it takes us fifteen minutes on site because we have the tools.

Second, we would be more thorough with our documentation. Every bit of technical detail would have been documented. Our network became so large that when a problem happened, we didn't know where to start fixing it, so we sub-divided the network to help us. We have sub-divided into ten different components and those ten are sub-divided into another fifty components, this helps us firstly, to diagnose problems and it allows most of the network to be up while fixing the problem. We sub-divided our network through documentation.

Third, we would put more emphasis on resources, service stability and reliability. Initially we thought once you drum the business up and do a lot of marketing, customers will come. They did, because sometimes we were not telling the truth about the reliability of our service. Then when we became flooded with customers we realized we didn't invest enough on our infrastructure to make our service reliable. We didn't plan and prepare ourselves for the massive response of the customers and the customers became frustrated. Now, I would start on the network and make sure it is very stable and then the network will advertise itself. We stopped advertising on the radio for about two years, but everyday we had orders and customers being referred to our company, including customers from overseas.



Finally, we would be more rigid in our pricing policy. Customers are always ready to pay a premium for good service. When we started, we entered into a price competition because you have competition in the free market and some companies try to undercut you, but as time went on we thought, "This competition is not sustainable. Let us fix the price of our service at the level which we think we can sustain and then concentrate on stabilizing the service and making it reliable." Our service is relatively expensive, but we are the biggest. We have 90 percent of the market, although we are more expensive than the others, because our service is good. We learned the hard way not to look at the competition.

One of the tools we got from the ICAP Program is the mobile radio that helped us to plan the network and to diagnose and see whether we could connect to an area or not.

Audience Questions

I would like to know what the clients use in order to connect to your service because what you presented today was mainly your backbone network and masts. Do antennas or WIFI also have to be available on the customer's side to connect?

First, let me say there is no one-size-fits-all solution. We use different solutions in different areas. We have general principles, for instance, in a city area the last mile we do by using five gigahertz because it's less congested and in the back halls we use 2.4 gigahertz but we do this with the trick of using channel 14 which is Japanese. We have seven or eight different types of equipment from different vendors and we never throw anything away. The antennas with problems are repaired and if a customer is far from the access point we take an antenna and CPE from the shop, dismantle it and put in a more powerful wireless card. In extreme cases we use a micro tick board and a SRA or XRA (super range or extreme range) ubiquity mini PCA. One of them is 400 milliwatts and another is 600 milliwatts. The 600 milliwatts is tricky because it needs more power to perform and you will need an inverter in the repeater session, but if you use SRA which uses 4,400 milliwatts, you could just use solar power without going through an inverter and just go from the 12 DC to power the AP. We use a variety of solutions depending on the situation.

Two quick questions: first, you mentioned that you first learned about the internet and its usage while in the US and that you didn't study IT, so how long did it take you to get familiar with the technical language? Second, how much of a barrier was government to your expansion and growth?

I graduated from systems engineering in 1991, but at that time we didn't learn about the Internet or how you could become an ISP and most of this technology was just being made available to the civilian youth. Initially, Internet and email was only for military use in the US and then the universities were allowed access. Emails also were sent using certain protocols, where they were sent in pieces and then knitted together before they reached their final point. I knew about the different protocols, but what I learnt in school only gave me an idea of what is out there. The actual education is in doing what you learn, because most of the things I have learned and implemented are not those I learned in school but the ones I learned after school and it's a continuous learning process. Technology has been changing very fast, WiMAX for instance, and I've been wasting time for three years to see how we can get WiMAX to work, but there are so many things that have not been solved. The idea of WiMAX is there but in practice it is WiFi.

Second, how does the government impede us? The government doesn't impede us, because we don't need the government. We would like the government to play a part in building the infrastructure, but this has never happened. The government did try to discipline the ISP by asking us to stop rubbish getting onto the Internet: the government banned a book in our country and then the book appeared on the Internet. We told the government that it would be impossible to stop this information from getting on the internet and explained how the internet could be good for the government. We usually manage to get around problems we encounter with government because the red tape doesn't come from the decision makers and I know most of the decision makers. I don't put all the blame on the government for impeding us, but I'm not satisfied with the effort the government is taking to accelerate, facilitate and enable the process of connectivity. The capacity on the part of government to understand and embrace what we are discussing is not good and it causes most of us who want to work in African countries to think much harder about the option that Inveneo took of trying to work with local partners.