DIGILOGIC INSIGHTS #3: How cold chain logistics can transform temperaturesensitive businesses in Africa

The DIGILOGIC team talks to JUHA KUNNAS, Head of Product, Vakava Technologies Ltd Oy & Chairman, Vakava Africa Ltd.

The start-up solution

Vakava Technologies specialises in cold chain logistics offering uninterrupted services that include refrigerated production, storage and distribution.

With projects in, among other countries, Kenya, Somalia, Rwanda, Zambia and Zimbabwe, Juha Kunnas understands how cold chain solutions can rapidly improve the quality and therefore the quantity of perishable goods, particularly in the fishing and agriculture industries.

"Cold chain logistics can offer better rewards to the producers while cutting waste," he sums up, "fish, for instance, will spoil within two to three days, sometimes less. But if you have cold chain logistics in place, you can keep it fresh for a week or even more." Some estimates suggest that current wastage in the fishing sector is as high as 35 per cent.

In brief, cold chain technology keeps foods at the correct temperatures to prevent bacteria from developing, transforming the distribution of perishable and/or temperature-sensitive goods. Producers and consumers benefit: consumers by being able to access products previously denied to them and producers who will see less wastage and higher sales.

The development challenges

The first challenge for Vakava Technologies was to ensure that their stakeholders understood the importance of the 'unbreakable' aspect of cold chain logistics. For example, it is no good if the refrigeration works at the start of the cold chain process but then breaks down on the road.

Linked to this point, are the challenges of trust and reliability. As Kunnas explains: "We have to be able to show that the goods are of a high quality. If a key piece of technology is missing, or if a section of the infrastructure is weak, we cannot offer a cold chain solution." Another challenge is that of resistance to change: "People often prefer to stick to the old ways of doing things."

Often in the 'old' way of doing things, too many middle men were involved which meant the producers themselves were not always earning enough to reward them properly for their efforts. "We needed to change the business model while keeping these guys involved," Kunnas explains.

To help meet these challenges, the Vakava team recruited young people from within an immediate community. These 'ambassadors' have the local knowledge and language skills to help shift opinion and encourage the changes that cold chain solutions inevitably require.

Another challenge for businesses, which would otherwise welcome cold chain logistics, is how to raise the finance to fund the process. Kunnas believes that entrepreneurs in Africa have to prove that they have a much more profitable business than they would if they were the equivalent entrepreneurs in Europe pitching to potential investors.

"People have great ideas", says Kunnas, "but ideas are only the start of the process." He argues that it is also harder to source investment in Africa than in Europe, not only because the interest rates can be a daunting 20 per cent but also because of the general lack of assets to be able to guarantee that finance. As a result, many financial products have to be paid for in full and up front. Kunnas is keen to encourage a range of far more imaginative Pay As You Go schemes to help start-ups and entrepreneurs get off the ground.

"We all need to understand business environments better," he reflects. And one of the best ways to achieve this is to encourage the sharing of different experiences which, in turn, can help with funding. He would like to see greater use made of the local ambassadors who often have the contacts and know-how to match entrepreneurs with potential funding opportunities. "When we have scalable solutions to these challenges then the growth of the business will happen organically," he emphasises.

Looking to the future

It is vital, especially for outsiders, to recognise the many different business cultures in Africa in order to build scalable solutions by sharing good practice. "When we have good practice, we can offer the same kinds of solutions and apply them to different businesses."

Africa is the home of small businesses and small farms, often family owned. As a result, Kunnas believes that "we require business models to suit that environment so, for example, we need cool boxes and cooling systems that offer a fast and responsive service to the smaller producers."

Another important factor for the future is to build a raft of transparent data that will, in turn, contribute to developing the right solutions. These might involve finding more efficient ways of delivering perishable products to the cooling facilities or data on where the infrastructure is less reliable. Given that maintenance is also a vital component of uninterrupted cold chain technology, data on sourcing the suppliers of spare parts is essential. "Data ultimately belongs to the users and that is why co-operation is so important." There is already, Kunnas adds, an encouraging amount of logistics data in universities that offer a range of helpful best practice examples.

Developments in technology must also be easy to use in order to build a unified and scalable logistics industry. "Sometimes we make things from overseas far too complicated," Kunnas suggests, "Everyone understands English but there are many local languages and that's why you need local guys on the ground if you want to succeed with the changes."

He is, however, optimistic about the future and predicts that by 2027, a large community of young entrepreneurs in Africa will be sharing best practice and technology alongside more responsive funding instruments and a strong database of knowledge about logistics. Kunnas will be delighted if these entrepreneurs build a sustainable business for themselves and are not "forced to sell to the big players. We Europeans are the old guys! The future is energetic, smart and looks great!"