

Fruberica is using iPads for its quality inspections



This Fruberica case study is based on a case study published by RPO ICT Solutions, a LANSA and IBM business partner in the Netherlands. RPO is an all-round ICT services provider and has been a leading software solution provider in the fruit and vegetable distribution sector for over 25 years. Initially RPO offered AGF/ng, as an IBM i and RPG-based ERP solution, extended with LANSA for Web access. Now called Freshng, the solution has been completely redeveloped in Visual LANSA and is available on IBM i, Windows and Linux servers or as a Cloud solution. Freshng is used by nearly 100 organizations in the Netherlands, Germany and Spain.

Fruberica, using the ERP solution on IBM i, was one of RPO's first customers to extend its implementation with a mobile app for quality inspectors. The mobile app, developed with LongRange from LANSA, allows inspectors to use their iPads to view real-time ERP back-office data about the batches of produce that have been received in the delivery hall. They then use their iPads to enter their inspection findings for these batches. The inspection result is immediately validated and updated in real-time to the ERP system on the IBM i and available to sales staff.

Fruberica, based in the Netherlands, imports greenhouse vegetables, such as tomatoes, eggplants, zucchinis and peppers, from Spain and Morocco. From Fruberica's distribution center, located in De Lier, these products are then delivered to customers in the Netherlands and elsewhere in the world. The company's peak period is in the winter, when there are less greenhouse vegetables being harvested in the Netherlands. Fruberica's annual growth has

been around 10% for several years in a row. To continue to support its strong growth, Fruberica decided to automate the flow of information, starting with its paper-based quality inspection reports. Fruberica's quality inspectors are now equipped with custom-developed mobile apps on iPads to carry out their work. This has resulted in efficiency gains and more effective communication with customers.

Keeping up with Growing Volume

The purchased vegetables are delivered by truck and are, immediately after unloading, assessed on a range of quality characteristics, such as ripeness, weight, color, temperature, size and firmness.

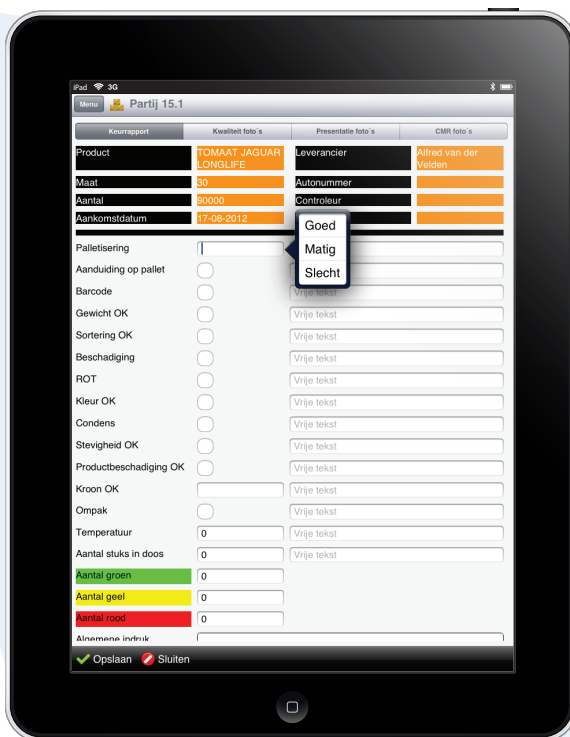
"Each batch is different," says General Manager Michael Holslag. "There are quality differences between the pallets, and sometimes even between the packed units on a pallet. It is of the utmost importance in the fresh industry that we promptly classify the produce we receive, in order to be sure we can swiftly deliver the right product to the right customer. This effectiveness of delivery has significantly contributed to our success. Ten years ago we were relatively small, but today we're one of the major players in our industry."

"It now only takes a few seconds to email the inspection report and photos."

Until recently, Fruberica's quality inspectors recorded their findings on notepads and order forms. Communication between the inspectors, who carry out their work in the receiving hall on the ground floor, and office staff, located on the top floor, was mostly verbal. Due to Fruberica's continuous growth, that way of working came under pressure.

"It happened regularly that when a customer called with a question about a batch of produce that had arrived earlier that day, I had to put that call on hold and run downstairs to find out the details about that batch. Especially for large orders, you need to provide the right price and details straight away, because you will not get a second chance," explains Michael.

During the winter peak of 2011/2012, Fruberica's team had a hard time keeping up with the volume of business. Karel Holslag, father of Michael and consultant to the company, called in RPO ICT Solutions, Fruberica's regular ICT provider, to collaborate with the team and come up with a solution to improve efficiency on the warehouse floor. Together the two organizations came up with a plan. →



The app allows quality inspectors to enter a formal value for each of the 14 quality control criteria, as well as adding their free format comments for each.

Use the iPad as Input Device

As a first step, Fruberica upgraded its digital network in order to provide a solid infrastructure for further automation and innovation. Secondly, cameras were installed to provide office staff with a direct view of the unloading trucks and the produce on the floor. The cameras can zoom in to the smallest level of detail.

Next, Fruberica and RPO explored what options were available to replace the paper-based inspection reports with digital recordings. Their decision was to use iPads to capture and transmit quality inspection data. Karel Holslag, explains "The intuitive nature of the iPad was the main decision factor. Everyone knows how to use them. The challenge was how to make the Apple iOS talk with our IBM i-based Freshng ERP solution from RPO. Fortunately that turned out to be straightforward."

In the summer of 2012 RPO developed a quality inspection app, based on the 14 quality control criteria that Fruberica uses. RPO used the LongRange development tool for this. LongRange is a native mobile app builder from the LANSA organization. The solution consists of a server-based component (LongRange Server) and a native mobile App that runs on the mobile device. LongRange server calls the associated program on Fruberica's IBM i server (this can be an RPG, COBOL, CL or LANSA program). The program performs its processing and issues a send screen command. LongRange Server sends the screen to the mobile app, together with instructions as defined with LongRange Studio. The mobile app interprets the instructions and presents the data on the mobile device. LongRange supports both Apple and Android devices.

Using this LongRange bridge, inspectors can use their iPad to view real-time Freshng ERP back-office data about the batches of produce that have been received in the delivery hall. They then use their iPads to enter their inspection findings for these batches of produce. The inspection results are immediately validated and updated in the ERP system on the IBM i.

Inspection New Style

Michael says, "The inspection App touches the heart of our business. That's why we've spent sufficient time to make sure we define the right criteria, using pick-list and checkbox fields. There is also a free format field, which allows the inspectors to express their opinion in words. Often half a word is enough to qualify a product."

Fruberica also changed its business procedures. Upon the arrival of a batch, the inspectors now use their iPads to take two photos: a photo to document the overall quality of the batch and a presentation photo



Immediately after unloading, the purchased vegetables are assessed on a range of quality characteristics.

"Inspection results are immediately available to sales and admin staff."

with a more commercial purpose. In the past, photos were taken only occasionally and it was a manual task to associate the photos with the actual batch of produce. Today the photos have become an integrated part of the inspection procedure and a link to the photos is automatically stored in the ERP system. The iPads are also used to take and store a picture of the CMR delivery note.

Once an inspection report is finalized, it is immediately transmitted from the iPad through WiFi to the IBM i ERP system and so is available to sales and admin staff. There is no running up-and-down any more to get inspection reports from the warehouse to the office. Fruberica's inspection cars (battery-powered inspection platforms on wheels from Robur) have also been adjusted and are now equipped with a power socket, so that the iPads are continuously charged.

Efficiency Gains

Since October 2012, all inspections have been carried out using the iPad App and Fruberica is very pleased with the results of the project. "At first I was hesitant about using iPads, because my top priority is to protect the bond my team has with the product and the company. Using iPads, instead of verbal communication, could have resulted in putting up a barrier. But the implementation went smoothly and the results exceeded our expectations," says Michael.

"The team very quickly got used to the iPad

app. It may seem a huge transition, but we are using exactly the same inspection criteria as before. We just moved the data entry from paper to the iPad. One of our part-time inspectors, the father of the current owner, is 81 years old and he was productively using the app within a week."

"The inspection team can now handle a much bigger workload, without any sacrifice in the quality of their work or team spirit. Communication is now not only faster and more accurate, it has also contributed to a calmer atmosphere in the workplace. No one has to run up and down any more to get the inspection reports and photos from the warehouse to the office."

"When a customer enquires about the quality of a specific batch of produce they are considering to order, it now only takes a few seconds to email the relevant inspection report and photos," concludes Michael. ■

Snapshot

Customer: Fruberica, based in the Netherlands, imports greenhouse vegetables from Spain and Morocco, and distributes these worldwide. www.fruberica.nl

Challenge: Speed and quality of communication about produce with customers.

Solution: iPad app for quality inspections integrated with IBM i-based Freshng ERP system.

Key Benefits: Significant gains in capacity and speed of processing incoming produce. More effective communication with customers.

Product Used: LongRange