

## ***Qlfresh Agrostis Profile***

**Project Name:** QIFresh

**FIWARE Accelerator:** Flnish

**Grant Funding:** from April 2015 to March 2016

**Level of Grant funding secured:** €124,000

**Target Sector:** Agrifood

**Company:** Agrostis

**Country:** Greece

**Web:** [www.agrostis.gr](http://www.agrostis.gr)

**Contact person:** Vangelis Vassiliadis

**Email:** v.vassiliadis@agrostis.gr

## ***Vision and Market Need***

The QIFresh App facilitates collaboration between retailers, quality inspectors and vendors/suppliers to ensure that shipments of fresh fruit and vegetables meet the minimum marketability requirements according to EU Directives. The platform defines a workflow for the Quality Inspection (QI) process that facilitates the involvement of retailers, inspectors and vendors/suppliers.

The market need was validated through market research carried out from Q2 2015 to the present. This included discussions with businesses active in this sector, participation in trade fairs and B2B matching events. This was carried out in collaboration with Novacert, which is an agricultural consulting company.

Retailers enter shipment information and define the QI templates (requirements). The quality inspector plans and executes an inspection and creates the report. The supplier can then view the report and the QI result. All parties get notified through the platform of any change/update in the process.

The value proposition for end users is fast and efficient Quality Inspection, based on standardised reporting, automated communication and collaboration with all key business partners.

## ***Target Market and Revenue Streams***

While the initial target market is Greece, in the longer term the market opportunity is global. The QIFresh App targets Quality Inspectors and large retailers of fresh fruit and vegetables (e.g. multiple supermarket chain). In the EU alone there are more than 3 million shipments per year [faostat.fao.org] and the QI process is currently done either manually or via proprietary systems that cannot effectively communicate the inspection and reporting requirements between the parties involved.

Revenue streams include once off seat-based licenses with a small fee per QI report generated or annual subscriptions based on volume.

## ***Competitive Positioning***

Direct competitors including QCone (NL) and MuddyBoots (UK), which are oriented towards use by Quality Inspectors and Enterprise supply chains respectively. Indirect competitors include ERP systems with Quality Management Modules (e.g. SAP R3 QM) that are used by large scale retailers and suppliers in the context of Enterprise Quality Management.

## QIfresh FIWARE Case Study

March 2016

The following matrix summarizes the main characteristics of the competition in terms of its positioning, main target group, focus of their solution and the technical provisioning

System Dimension	QCOne	MuddyBoots	SAPR3 QM	QIFresh
Positioning	Quality Inspection of Fresh.	Integrated Quality Assurance and Quality Control software	Quality management module	Quality Inspection for Fresh
Targets	QI Firms	Enterprise Supply Chains	Production Facilities Enterprise Supply Chains	Retailers, QI Agents Suppliers
Focus	Quality Inspection Reports and Statistics	Quality Control, Supply Chain Optimization	Internal QM of Facility and Enterprise	Quality Inspection Workflow Collaboration
Cloud/Mobile	Yes	Yes	No	Yes

The QIFresh Unique Selling Proposition provides a transparent, open solution focused on facilitating collaboration and communication between the parties involved. It is focused on the Fresh Fruits and Vegetable sectors and provides a platform for transparent but secure sharing of Quality Inspection data, reports and statistics.

QIFresh App features include:

- Retailers can organize loading plans and the quality inspection of each shipment. They receive process updates and the final Quality Inspection report.
- Quality inspection companies perform the inspection and prepare the reports.
- Fruit and vegetable suppliers are notified of the planning, execution and the result of the inspection and have access to the inspection report.

Benefits include:

- Full process overview from loading plans to the quality inspection reports, covering all the needs of retailers, quality inspectors and suppliers.
- Improves communication & collaboration between retailers, quality inspectors and suppliers.
- Saves time & effort needed to execute the inspection and subsequent reporting
- Minimizes errors during inspection or transferring data from paper reports.
- Eliminates paperwork & e-mail exchanges.
- Provides accurate inspection reporting and useful statistics.
- Instant access to previous Quality Inspection reports.
- Easy and simple to use mobile App which facilitates the capturing & recording of quality inspection data on the spot.
- No upfront investment required.

## QIfresh FIWARE Case Study

March 2016

In addition to these benefits, QIFresh allows businesses to also find and connect to new partners, suppliers and customers as part of the QIFresh Community

### Enabling Technology

Agrostis is an IT company that develops and markets software applications exclusively for the Agrifood domain. Agrostis's core product is ifarma, an integrated cloud and mobile farm management system. Penetration of ifarma is picking up in Greece where more than 120 individual farmers is using it as a farm management tool and more that 3,000 farms are managed or monitored using ifarma by consultants and/or agri-food production companies. Agrostis is also in discussions in relation to distribution agreements in Latin America. While QIFresh is not directly integrated with ifarma, its development is based on the same technology, expertise and tools.

FIWARE provided access to tools to support product development. The QIFresh App leveraged the *FISpace B2B Collaboration platform* to host the app and support collaboration, *KeyRock Identity Management* for Authentication and authorisation, *Wirecloud GE* for Web interfaces and *WStore and Marketplace* for App distribution.

Diagram 1 - 6 below provide insights into specific functionality related to process support, the quality inspection form, attaching photos and locations, generating reports, statistics reports and a mobile app for onsite quality inspection.

Diagram 1 Full process support from Loading Plans to the Quality Inspection reports

## Qlfresh FIWARE Case Study

March 2016

Diagram 2. Quality Inspection Form

Diagram 3 Attach pictures and documents

## Qlfresh FIWARE Case Study

March 2016

Name	Description	Variety	Owner	Public
1	Nectarines Standard	All	All	All
2	Oranges Valencia	Peaches	Novacert Std	Yes

Name	Report Group	Applies to	Category	Tolerance Extra (%)	Tolerance I (%)	Tolerance II (%)	
1	Calyx and Peduncle	Presentation	Piece	Defects	10	10	10
2	Colour	Quality	Piece	Organoleptic	5	5	5
3	Consistency - Firmness	Quality	Piece	Organoleptic	5	5	5
4	Diseases	Presentation	Piece	Defects	0	0	0
5	Evolving pests	Presentation	Piece	Defects	0	0	0
6	Foreign Matter	Other	Box	Cleanliness	0	0	0
7	Healed / Dry wounds	Presentation	Piece	Defects	10	10	10
8	Moisture	Quality	Piece	Organoleptic	0	0	0
9	Non typical shape	Presentation	Piece	Defects	10	10	10
10	Not evolving pests	Presentation	Piece	Defects	10	10	10
11	Number	Product Definition	Box	Confection	0	0	0
12	Odour	Quality	Piece	Organoleptic	0	0	0
13	Open and unhealed wounds	Presentation	Piece	Defects	0	0	0
14	Palletizing	Product Definition	Box	Confection	0	0	0
15	Rots	Presentation	Piece	Defects	0	0	0
16	Size	Product Definition	Piece	Confection	10	10	10
17	Soil - Mud	Other	Box	Cleanliness	10	10	10
18	Sprouting - Germination	Presentation	Piece	Defects	5	5	5
19	Taste	Quality	Piece	Organoleptic	0	0	0
20	Treatment residues	Other	Box	Cleanliness	0	0	0
21	Weight - Boxes	Product Definition	Box	Confection	0	0	0
22	Weight - Pieces	Product Definition	Piece	Confection	0	0	0

Diagram 4 Generate custom Quality Inspection Reports

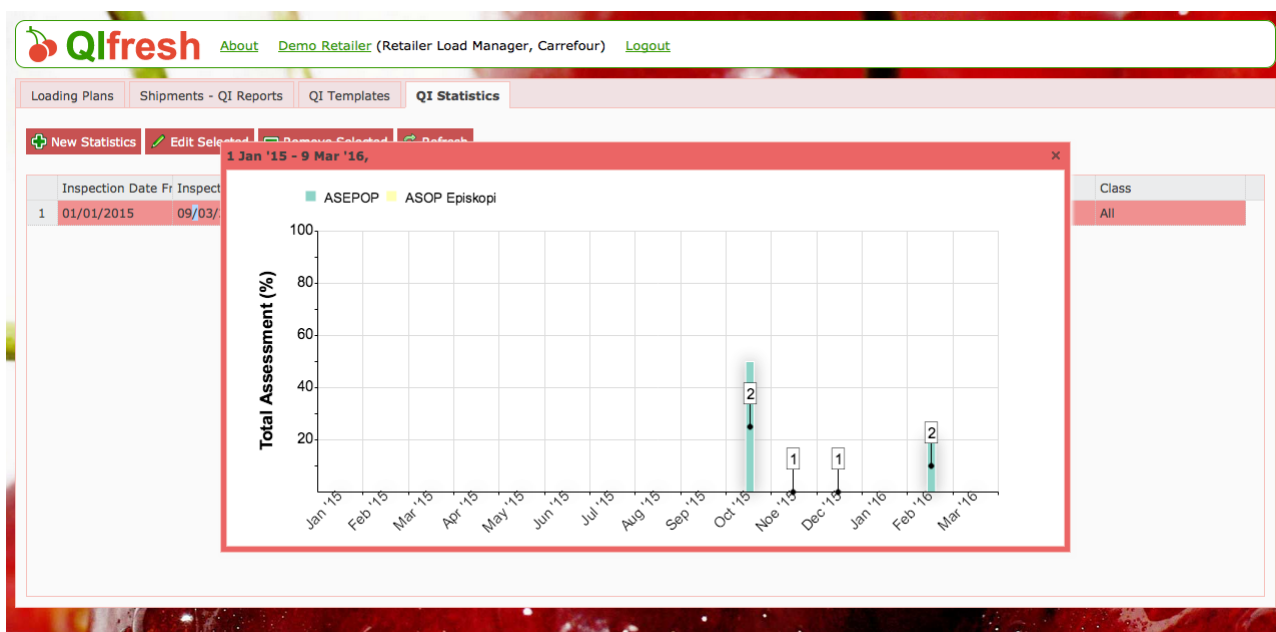
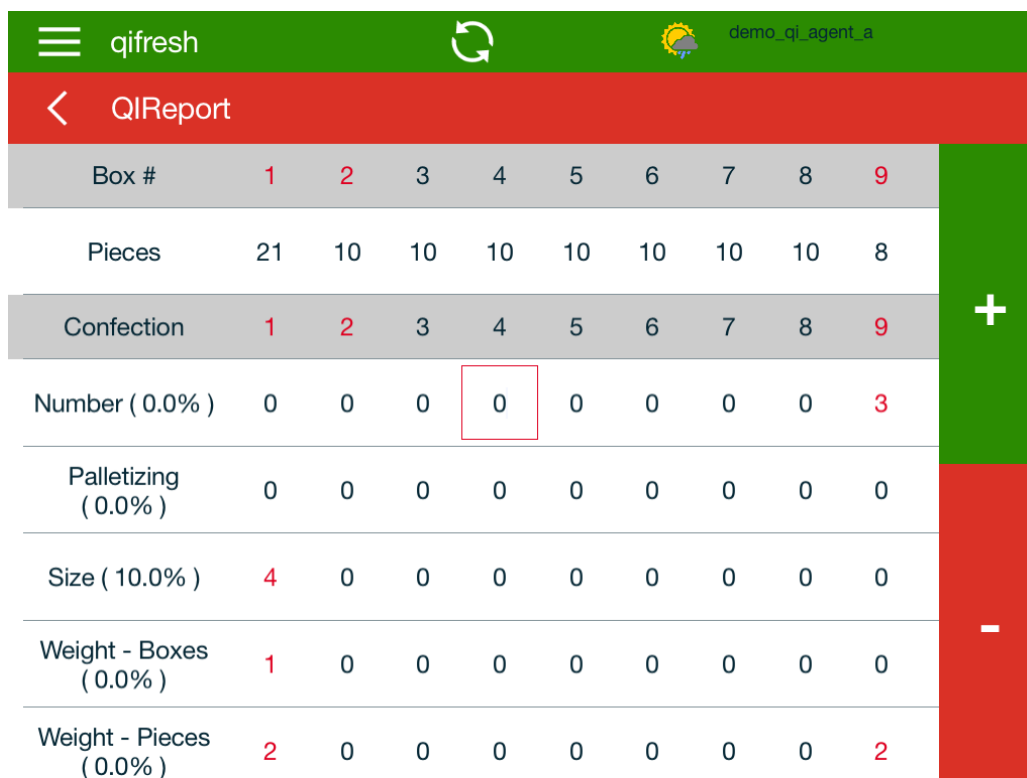


Diagram 5. Statistics Reports per product, quality property and supplier



## QIfresh FIWARE Case Study

March 2016



Box #	1	2	3	4	5	6	7	8	9
Pieces	21	10	10	10	10	10	10	10	8
Confection	1	2	3	4	5	6	7	8	9
Number ( 0.0% )	0	0	0	0	0	0	0	0	3
Palletizing ( 0.0% )	0	0	0	0	0	0	0	0	0
Size ( 10.0% )	4	0	0	0	0	0	0	0	0
Weight - Boxes ( 0.0% )	1	0	0	0	0	0	0	0	0
Weight - Pieces ( 0.0% )	2	0	0	0	0	0	0	0	2

Diagram 6 Mobile App for on-site quality inspection

## Progress to date

Agrostis is focused on developing and marketing ICT solutions for the AgriFood domain. Work on the QIFresh App commenced in April 2015. Agrostis secured a FIWARE Grant under the Flnish Accelerator as part of the FI-PPP Phase 3 Programme to develop the application and undertake market analysis.

Over the past 11 months the QIFresh App has been developed and the beta system will be rolled out during April 2016. The beta testing phase will run for 4 – 6 months.

Based on alpha testing with NovaCert and a number of their customers, the key functionality already exists. The key effort is now focused on improving user interface, generation of custom QI reports and pre-defining database of fruit and vegetable categories and QI templates.

Further technical development planned during the next six to twelve months include: fine tuning the mobile version and improving the user and organisation management.

Agrostis is currently raising a further €300,000 in investment over the next 6 months to fund commercial marketing and sales activities after the beta process is completed.