

LET US MANAGE YOUR LETTUCE: A Networked Solution for Hydroponics

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Managing a large scale hydroponics business is a time consuming and complex task. The quality of the produce depends on the close management of important data. Multiple times a day this data must be manually controlled and monitored to ensure the produce is kept at a high standard.

At times monitoring can be extremely difficult as the client has to be onsite to manage the data. The aim of this project was to simplify these tasks by allowing the client to view and control several key aspects of the business from any internet compatible device. This access significantly reduces the time taken to perform vital tasks and allows the client more freedom to efficiently manage other areas.

Discussion

Lettuce Link is an online information and management centre for a commercial hydroponic lettuce company. Lettuce Link was developed to assist the client with daily tasks associated with quality control of produce. The group developed a system that ensures continuous remote monitoring of elements relating to environment control and produce management.

As the hydroponics business grew, more and more aspects of the business needed consistent monitoring and control. The client mentioned situations where business opportunities had to be managed around times where particular environmental control actions needed to take place.

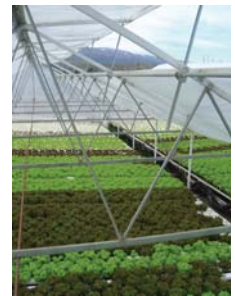
A major factor as to why an automated system had not been installed was the extremely high cost as each environmental control system has to be custom made to suit each plastic growing house. Suitable automatic systems start at around \$10 000 for his setup. These expensive automated systems were also not very accurate which is why the client still wanted manual control over the system.

Solutions

Vent control information sent from website to vent controller.

Real time environmental conditions displayed and recorded.

Crop management information sent/received from database.



Client Comments

... a valuable tool for our business
... is easy to use and will become a valuable tool for future planning
... we have found the system as a whole offers us considerable time savings in the monitoring and controlling required
... their attention to detail has ensured a system which is a valuable asset to our business now and a sound platform from which we can continue to develop as our business grows
... their professionalism and commitment to the project should be commended

**Mark Smith, Managing Director
The Lettuce Company**

