LET IT HELP IN THE CRUSADE FOR A GREENER, LESS WASTEFUL INDUSTRY

This month Anglia Business Solutions talks us through some of the ways in which IT can help the industry in the universal drive to cut carbon emissions. By keeping track of product freshness and load planning more efficiently there are financial as well as environmental benefits to be had

IT IS difficult to open a newspaper or view television today without getting the message on global warming and its effects on our environment. With food producers in the front line, they hardly need reminding of the devastating effect that unpredictable weather patterns can have on their businesses.

However, with politicians now getting in on the act in a very big way, it is inevitable that new legislation will be introduced to penalise those seen to contribute towards the production of greenhouse gases. So how can information technology help?

One of the major issues within the food production industry is the large amount of waste produced by inefficient practices. This is before it gets to consumers in the developed world, who waste up to 20 per cent of purchased food items.

Large quantities of food are sometimes transported around the world simply to be dumped or used as animal fodder. The cost in terms of transport and handling is substantial. From an environmental perspective, the cost in CO^2 emissions is high. In business terms, the lost revenue in low-margin operations can be significant.

IT can help in a number of ways and the contribution can quickly add up to substantial business and environmental gains. For example, getting a better handle on supplies through more accurate forecasting can help to reduce product waste.

Improved forecasting can also help to refine packaging needs in line with demand. The trend in fresh produce towards pre-packaged rather than loose products will inevitably drive up the amount of packaging material in the industry. Pressure groups are already highlighting the environmental impact of over packaging.

The transport sector is also in the front line when it comes to CO^2 emissions. The vast majority of fresh produce is moved by road to reach retailers. With fuel charges so high, improved load planning can help reduce the number of trips and therefore the accompanying fuel bills. This has got to be good for both business and the environment.

Losing track of perishable items until past their sell by date is another well known industry issue. Not only is the revenue lost but the company picks up the tab for disposing of the unsaleable goods.

Dynamic information systems linked to mobile devices can significantly reduce the risks of losing or misplacing goods. Alerts can be incorporated that are triggered by dates that highlight the goods at risk. The result can be reduced losses on write-offs while improving the efficiency of product handling.

How about the high costs and inefficiencies involved in handling massive volumes of paper? According to new research by the Butler Group, more than 50 per cent of all staff costs are now allocated to employees who spend the majority of their time on "information work". They spend up to a quarter of their day searching for the relevant information to carry out given tasks. Much of this time is spent transcribing the information onto other pieces of paper which then has to be read and filed.

In addition, a significant volume of paper is still stuck into envelopes and sent by post. While incurring additional handling and postage charges, it also creates more road journeys to deliver. Not only can modern systems make it simpler to locate and use data, they also facilitate the sending and sharing of information.

Most people in business today have access to email and the internet. What's wrong with emailing invoices, statements, letters, and proof of deliveries etc. to your customers and suppliers directly from your central information system? Its quick, efficient, cheap and eco-friendly.

Why not securely share relevant information with your suppliers and customers using the internet? It means that they can keep up to date on what's happening to their orders or produce while helping themselves to relevant information 24x7. It also releases your staff to focus on more productive activities.

If all of this appears a little futuristic, the reality is that the technology to facilitate all of this is now becoming mainstream. Modern solutions incorporate internet and mobile ready applications while addressing more sophisticated and flexible functionality now demanded by dynamic businesses.

As a result, medium-sized organisations can become more efficient while using IT to become more eco-friendly. Not only will the resulting savings help the environment, it also makes very good business sense. O

RFID tags improve CA grape quality

THE QUALITY of grapes at a Californian farm has been improved with the use of passive RFID tags, active wireless sensors and geographic information systems (GIS).

The Lake County-based biodynamic farm, Ceàgo Vinegarden, which promotes biodiversity by raising a number of different crops and animals, has adopted a number of high-tech farming methods alongside its environmentalist principles.

These include handheld RFID readers linked to Google Earth, wireless sensor pods that measure air temperature, humidity, solar radiation, soil moisture and temperature, as well as software applications that can calculate grape ripeness. The tags and sensors have also made its operations more efficient and reduced the environmental impact of the crop on the surrounding area.

Owner Jim Fetzer is working with Californian consulting firm Geovine, which specialises in geographic information systems related to natural resource management, and Denver-based engineering and construction firm CH2M Hill.

Some 500 passive RFID tags have been attached to posts at the ends of the vine rows at Ceágo Vinegarden.

Geovine president Josh Metz said: "As workers document various processes, such as checking the grapes' progress, they use handheld readers to interrogate the tags to identify the row. Traditionally, they would go down the row, grab bunches of grapes from different parts of the rows and then check them for sugars and acids."

But workers using the tags and sensors can record when samples are taken and identify the row from which each bunch came, Metz said.

He added: "We can also document if a row was pruned, and then link that with the person who did the pruning, and how long it took." O