

This document has been provided specifically to answer questions asked by companies in Developing Regions prior to implementation of ProducePak.

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Why ProducePak?

ProducePak has a long history of implementing projects in regions across both developed and developing regions. In particular, developing regions include Kenya, South Africa, Guatemala, and Egypt. New projects in 2010 include Ghana, Morocco, Tunisia, and Algeria.

ProducePak consultants have great experience with projects in developing regions making difficult projects successful ones.

The ProducePak solution helps to enforce international standards very quickly where the users of the system have little or no experience with computers or implementing food production, safety, and best practices in horticulture businesses.

In many cases, the ProducePak solution has been very successful during implementation where the users being trained have no experience at all with computers. A core feature of ProducePak is that the system "guides" the user through the best practice processes for safe and efficient food production.

ProducePak expert consultants provide ongoing support to clients in the form of email, phone, remote, and onsite training services; and also upgrades to the software every three months which will include new features, reports, and industry facilities to ensure international standards are always supported by ProducePak.

The on-site training process provides an expert ProducePak consultant that will manage the entire installation, configuration, deployment, and training for the project. This ensures a high degree of success for the project, and provides the best possible results and speed for the project.

Case Studies

To review case studies from developing regions using ProducePak, use this link <http://www.producepak.com/pdf2/producepak-case-study-egypt.pdf>

To review case studies from developed regions using ProducePak, click on this link <http://www.producepak.com/pdf2/producepak-case-study.pdf>

Benefits from ProducePak Packhouse

The following is a list of benefits from ProducePak Packhouse systems.

General Benefits Include:

- improved profit in the packing process
- improve staff efficiency by easily and quickly implementing best practices
- reduce duplication & redundancy
- decrease management response time
- improve reporting, analysis, and business monitoring
- instant cost reporting, live at any time!
- streamline & automatically manage processes
- enforce operational standards
- create full traceability of all produce handling in all business areas
- quality improvements
- easy audits and traceability management
- increased staff performance via higher levels of accountability and bonus/incentive schemes
- share and collect information from customers online, reducing administration costs
- Increased accuracy of produce handling reduces waste
- Batch based packing process allows easy traceability of all product from either end of the supply chain
- Paperwork and identification labels can be automatically generated at the point of produce deliver, saving time and administration managing this process
- Increase Packhouse efficiency by automatically maintaining HACCP, EurepGAP, GlobalGAP, ISO x, BCA, and other standards during the packing process

Other Benefits Include:

- Increased accuracy of produce handling reduces waste
- Batch based packing process allows easy traceability of all product from either end of the supply chain
- Paperwork and identification labels can be automatically generated at the point of produce deliver, saving time and administration managing this process
- Increase Packhouse efficiency by automatically maintaining HACCP, EurepGAP, GlobalGAP, ISO x, BCA, and other standards during the packing process
- Reduced waste of produce inventory
- Increase staff accountability and monitoring
- Bonuses and incentive schemes motivate staff performance
- Easy traceability management
- Reduction in administration errors via improved handling processes of produce
- Increase customer satisfaction via orders being delivered correctly, and on time
- Enhance communication between marketing and Packhouse management
- Reduce administration time spent making reports for packing requirements
- Effortless traceability of all product palletised
- Easy labelling of product, including origin, branding, packer details and more....
- Reduce waste by accurately tracking stock and finished product
- Traceability accuracy is enforced; providing a higher level of traceability and easy fetching of traceability information
- Labelling and identification can be tailored to meet Packhouse (or customer) requirements
- Reduce pallet handling errors by using bar-code identification systems
- Rapidly know each clients purchasing trends to determine the best market for produce
- Reduce paperwork and manual data entry during consignment, and increase accuracy
- Increase customer satisfaction via orders being delivered correctly, and on time
- Reduce inventory waste/shrinkage by increasing control and accountability over inventory consumption
- Easily ensure there is always the correct quantity of inventory on hand to perform required packing processes; by analysing and receiving alerts from inventory balances
- Enhanced inventory control allows the business to better manage the quantity of materials on hand, resulting in improved cash flow
- Increase staff accountability and monitoring of inventory consumption
- The Mobile Packhouse software controls staff tasks such as Dispatch by instructing staff on where to find stock to fill orders. Smart features like this are also used in the Stock Assignment processes

- Staff spend less time writing information onto forms, labels, and other documentation, and more time doing their critical tasks
- ProducePak Mobile Stock Control allows your staff to perform data entry from anywhere on your site, making recording of stock, pallets, quality assurance, and pallet dispatch convenient and fast from anywhere at your packing facility.
- By using Mobile Stock Control staff are encouraged to record stock and pallet information more accurately. The Mobile Stock Control module removes the necessity of staff requiring a PC to enter data and increases the speed and ease which information can be recorded. Mobile Barcoding is a specialised mobile solutions combining wireless networking, PDA, and barcode scanning technologies.
- Easily enforce consistent Quality Control tests for each product/traded unit/grade between all Quality Control officers
- Enforce customer Quality Control tests
- Increase staff performance by rapid identification of common mistakes or quality breaches
- Save on packing costs by identifying incorrectly packaged/processed product immediately and take corrective action
- Adjust packing charges by monitoring the quality performance of growers/suppliers
- Justify raw produce purchase price adjustments to growers/suppliers by providing growers/suppliers with evidence of the quality of produce delivered to the Packhouse
- All quality control activities become more accountable by providing employees instant feedback on quality issues
- Advanced reporting is available which can be used to benchmark multiple departments, teams, or multiple companies
- For large organisations, Quality Control testing can be easily standardised over multiple companies or departments from one convenient location; enforcing consistent quality control processes throughout the organisation
- Centralise QC administration, making Quality Control over multiple organisations and departments easy

Features of Packhouse ERP

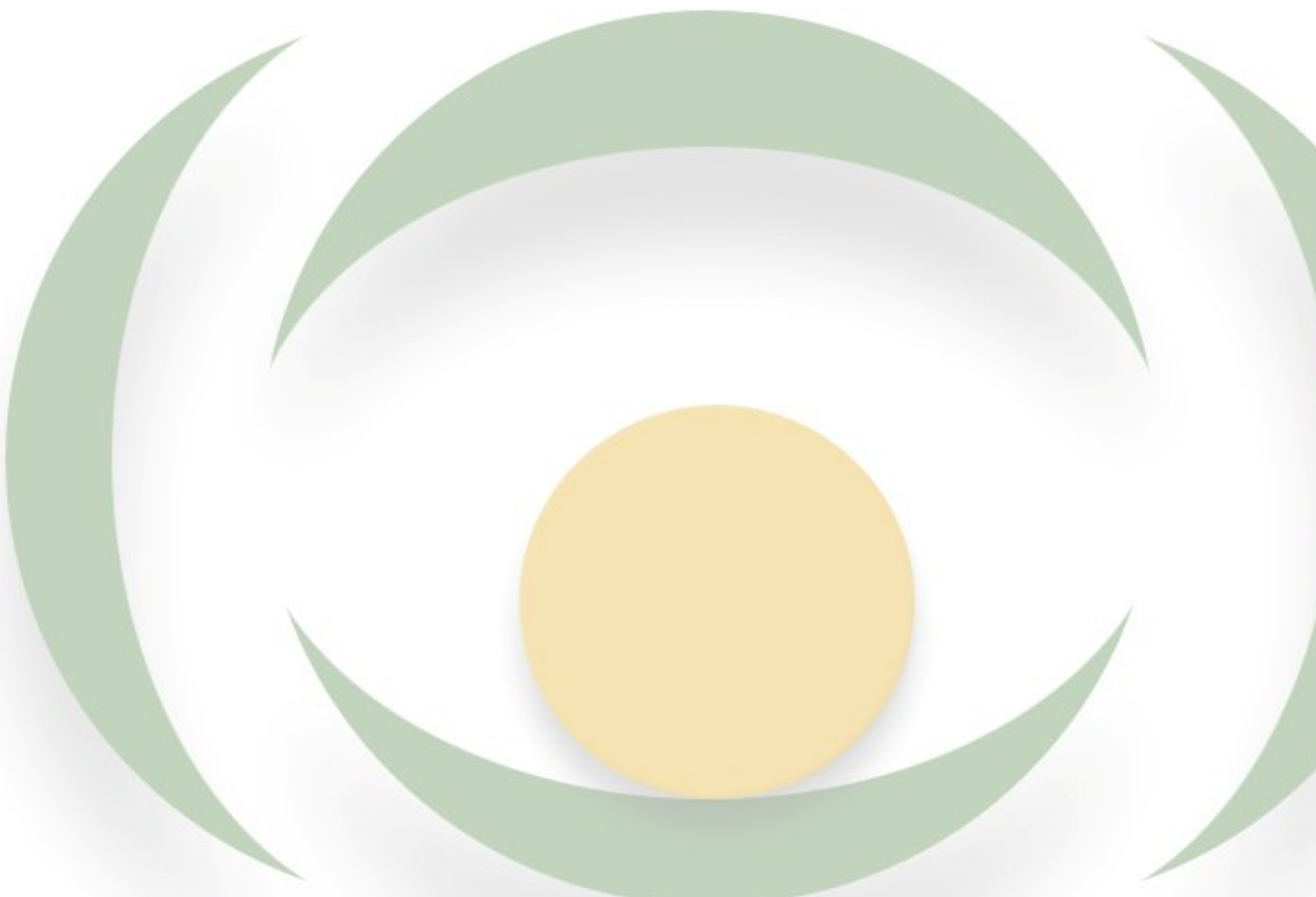
Whilst there are hundreds of features in the Packhouse solution, the following summarises the main features. Full details of the systems features can be downloaded from these links:

- Packhouse System Specifications
<http://www.producepak.com/pdf2/ProducePakPACKHOUSE.pdf>
- Packhouse System Demonstration
<http://www.producepak.com/pdf2/PackhouseSummaryProducePakSolutions.zip>
- Packhouse Mobile Solution Option
<http://www.producepak.com/pdf2/ProducePakPackhousePDA.pdf>

Features Summary

- Full Traceability Management
- Incoming produce management
- Full inventory/stock management
- Comprehensive pallet management with PDA and barcode enabled identification
- Packhouse labour management
- Batch based packing process management
- Packaging materials management
- Operational cost monitoring and reporting
- Employee monitoring and analysis
- Purchase Order & Sales Order management
- Sales, Consignment, and dispatch management
- "Grower Returns" management for co-operatives
- Extensive reporting & analysis facilities
- Produce maturity and ripening management
- Web enabled Customer Care Portal
- Integration with financial and general ledger packages
- Integration with payroll packages
- Integration with ProducePak Farm ERP
- Scan stock into batches
- record bin numbers and picker numbers for incoming stock
- move stock
- transfer stock off-site, and receive stock from off-site
- move pallets
- assign stock to batches
- perform pre-pack Quality Assurance and Quality Control
- perform post-pack Quality Assurance on cartons/packed bins
- dispatch finished pallets to customers
- use theoretically unlimited number of PDA's
- stock-take pallets that need to be sent to customers

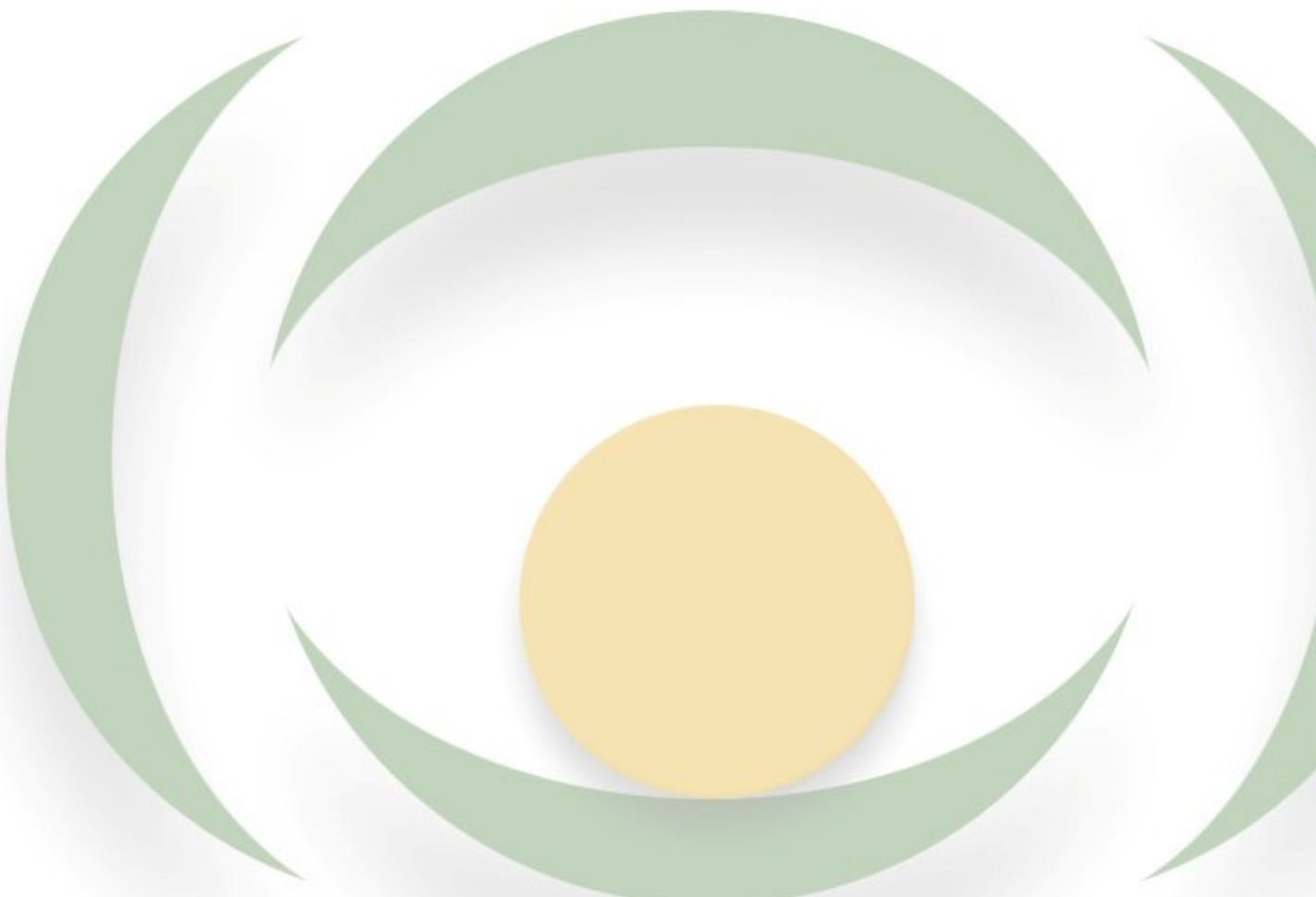
- view pallets on Dispatch Dockets
- dispatch management
- stock management
- use a PDA to manage stock stored at remote sites (eg: distribution warehouses in other countries)
- use PDA to count packed items for staff performance analysis (or use the Payroll Assistant module to pay packers based on the number of cartons they pack)
- Create Purchase Orders to acquire inventory
- Receive Inventory functions
- Perform multi-site stock takes, and or multi-depot stock takes
- Authorise the use of inventory from various storage depots
- Unlimited storage depots, at unlimited sites
- Batch & Lot number traceability
- Batch & Lot number recall processes
- Easy 'pending delivery' analysis



Benefits from ProducePak Farm ERP

The following is a list of benefits from ProducePak Farm ERP systems.

- Improved management of production activity monitoring and budgeting
- Be alerted to deviations in budgets immediately
- Better planning of resources used in the production process results in higher cash flow utilisation and profit enhancement
- Automatic traceability systems reduce paperwork and staff time spent documenting chemical and spray application activities
- Inventory management reduces shrinkage and allows easy stock-taking; improving cash flow utilisation by maximising usage of on hand resources
- Compliance for; and Audits of HACCP, EurepGAP, GlobalGAP, ISO and other standards become easier and quicker by allowing auditors access to traceability systems
- For large businesses, central production management can easily monitor multiple farm sites from once central location; saving time, and improving management response to any issues in the production process
- Pre/Post Harvest Interval (PHI), Withholding Period management stops staff from harvesting product that is still within a holding period after the application of spray chemicals; potentially reducing the possibility of losses due to a recall or rejection of produce due to chemical residue issues



Other Benefits from ProducePak Farm ERP

- Easy recording of farm activities
- Easily assess the status of all outstanding farm activities from one central location
- Take rapid corrective action where tasks are missed or performed incorrectly
- Increased accuracy of traceability
- Capture HACCP, EurepGAP, GlobalGAP, ISO x, BCA, FarmCare information
- Increased control over materials used during production processes results in improved cash flow
- Automatic enforcement of PHI & withholding periods
- Increased control over inventory allows the business to reduce inventory waste and misappropriation; and improves profitability
- Enhanced inventory control allows the business to better manage the quantity of materials on hand, resulting in improved cash flow
- Rapid access to levels of production inventory on hand at any time; at each site and storage location
- Easy re-ordering of inventory
- Store managers are alerted when items need re-ordering
- When important staff take holidays or need to be replaced, their knowledge of normal operations is retained in ProducePak and can easily be accessed by management and new staff.
- Increase profitability by standardising production practices across the entire business
- Stops production staff from forgetting important tasks, resulting in increased yield and profitability
- Ensures correct quantities and methods are enforced, increasing business profit
- Allows the development and analysis of new production methodologies to improve production efficiency
- Rapidly Identify production mistakes and anomalies for production activities, allowing management to take corrective action; resulting in improved yield and profitability
- Become a 'lean manufacturer' by arranging materials and labour resources to be delivered Just In Time, maximising business cash flow
- Detect budget over/under runs immediately and take corrective action, resulting in improved cost control and profitability
- Make financial decisions and improve financial planning based on full budgeting information being available **before** each season starts
- Remove 'nasty cash flow' surprises that may result from a lack of budget planning and monitoring
- Compare profitability of selected production methodologies to choose new production methods; resulting in increased business profitability
- Comprehensive cost control avoids budget blow outs and allows management to be aware of any problems immediately

Features of Farm ERP

Whilst there are hundreds of features in the Farm ERP solution, the following summarises the main features. Full details of the systems features can be downloaded from these links:

- Farm ERP System Specifications
<http://www.producepak.com/pdf2/ProducePakFARMMANAGEMENT.pdf>
- Farm ERP System Demonstration
<http://www.producepak.com/pdf2/FarmERPsummaryProducePakSolutions.zip>
- Farm ERP Mobile Solution Option
<http://www.producepak.com/pdf2/ProducePakFARMpda.pdf>

Farm ERP Features

- Comprehensive production task management for ALL production activities including Spray, Timesheets, Irrigation, Machinery Plant & Equipment Maintenance, Block Inputs, Planting, Harvesting, and more...
- Prepare production budgets prior to the start of each seasons growing, to improve materials, labour, and cash flow planning
- Monitor budgets on a daily basis to identify budget overruns and take corrective action
- Profit reporting down to individual areas of land at any time during and after the production process
- Automatically generate staff tasks and instructions to improve staff management
- Comprehensive activity monitoring systems to identify mistakes and deviations during the production process; allowing management to make corrective actions before incorrect practices or tasks cost produce quality/yield/profit.
- Automatic traceability of materials and labour used in production; instant recall from block, crop, and material inputs
- Comprehensive inventory management to improve resource utilisation and reduce waste includes traceability for inventory batches and integrates automatically with recall and traceability systems. Purchase Order generation, stock takes for multiple sites and depots,
- Mobile Farm Software allows staff to synchronise tasks to the PDA, record tasks and actual material consumption in the field, and then synchronise data with the ProducePak server back in the office; allows central monitoring of all staff activities at all times
- Integrate with Finance Package and Payroll
- Record Spray, Irrigation, Water, Planting, Block Inputs, Harvest, and virtually **any** task that is performed during production (contractors, soil tests, and more..)
- Plan tasks in advance or enter after they have been performed
- Costs are automatically allocated to each Block/Crop/Plot and area

- Multi-site enabled
- Recording of both Global and Site based overheads
- Automatically maintain traceability of materials used during production & automatic inventory allocation
- Generate staff/team instruction sheets
- View alerts for BHI / withholding periods etc
- Perform production cost analysis for each block
- Maintain labour traceability for all production tasks
- Visual display allows annual, monthly, weekly and daily views of production tasks filtered by selected Farm Site, or , Block, or Crop.
- Create Purchase Orders to acquire inventory
- Receive Inventory functions
- Perform multi-site stock takes, and or multi-depot stock takes
- Authorise the use of inventory from various storage depots
- Unlimited storage depots, at unlimited sites
- Batch number traceability
- Batch number recall processes
- Easy 'pending delivery' analysis
- Inventory "Check Out" and "Check In" logging to specific tasks, improves accountability and allows flexible control of inventory
- Easy logging of "evidence of consumption" recording for materials accountability
- Balances of inventory taken by each employee maintains accountability for task based farming activities
- configure the businesses standard production methods specify duration of tasks, materials used, labour used, equipment used
- trail, analyse and compare new production methods
- automatic scheduling of production tasks for each block for the entire season
- Monitor activities during production to compare 'estimated' with 'actual'
- generate entire budgets for each block, before production commences
- trial different production methodologies to fine tune budget and cash flow requirements
- monitor 'estimated' and 'actual' budget during the production season
- Budgets by: Detail, Item, Category Summary, and Date Range
- Production Costs Reporting
- Production Profit Reporting

Before & After Analysis (Farm ERP)

The following responses were given by a ProducePak client when asked about each area of the business and how ProducePak has helped them to implement better management systems.

Before ProducePak Farm ERP	After ProducePak Farm ERP Implementation
Budgeting and projections was difficult or non existent.	Budgets can be prepared for each area of land using a selected variety and “what if” analysis provides management with the ability to choose production plans.
Resource (materials and labour) was difficult to project. We were using spreadsheets to do this.	ProducePak provides comprehensive resource projection as part of the Budgeting module. Both labour and materials can be accurately predicted down to the individual product.
Budget monitoring was difficult and not real time due to the time it took to enter information onto spreadsheets and financial package	ProducePak Budgeting module provides real-time, daily budget monitoring. Budgets can be broken down to specific areas of land or monitored over a produce type, variety, farm, block, or site.
Planning staff activities was time consuming and often inaccurate	Using the Farm Diary, we can now plan staff tasks in advance, including Planting, Spray, Harvest, Irrigation, Inputs, and all other tasks. Staff can be given the tasks on daily printed worksheets or on a PDA on which they record any deviations from the plan.
Monitoring & Accuracy of farming tasks was inaccurate and often recorded too late or incorrectly, or goes unknown until its too late to make a decision.	Staff now record their tasks on printed timesheets or PDA. This information is synchronised with ProducePak and gives management instant alerts to any potential problems in the farming process. Recording of quantities of batch numbers and quantities of materials used (including labour) during tasks is now much more accurate and recorded quickly or in real time.
Accuracy of inventory and its accountability was low. Often we had different levels of inventory than expected, and often inventory would go missing with no accountability.	Staff now record the batches of inventory used, and quantities directly into ProducePak via PDA (or worksheet). From most of our warehouses our staff have to “check out” inventory, so we know who used

	<p>which resource and if they are expected to return any the warehouse manager is alerted. We have now reduced inventory shrinkage and loss, reducing our costs.</p>
<p>Often we would need a resource such as a chemical or fertilizer and it would not be available.</p>	<p>We now set minimum levels inventory items and the warehouse manager is alerted when it needs ordering.</p>
<p>Traceability of material inputs to a crop was very difficult. To perform a recall of a crop based on a batch number or invoice number of a contaminated input would require us to search potentially hundreds (or thousands) of worksheets to identify application areas.</p>	<p>When staff perform their tasks now, they record batch details of any materials into the task, with just a few clicks we can find out where a resource was used, and the details of any produce that was harvested from the production areas.</p>
<p>Training staff compliance for our standards was time consuming and had to be repeated over and over again (we use BRC and GlobalGAP on the farms)</p>	<p>Processes in ProducePak enforce the processes for GlobalGAP and BRC (and others); meaning we don't really need to train the staff on these points because they are being forced to comply.</p>
<p>Farm managers often had difficulty knowing the progress of each team; resulting in missed opportunities to take corrective actions. Often farm managers would spend a lot of their time on the phone trying to figure out what the status of work is.</p>	<p>ProducePak centralises all farm task information allowing for a central monitoring system where each farm manager can instantly see the progress of staff and tasks and make immediate corrections or adjustments where necessary.</p>
<p>PHI intervals would sometimes be missed by farm managers, resulting in potential breach of PHI compliance.</p>	<p>ProducePak now graphically shows farm managers the PHI periods and doesn't allow re-entry or Harvesting where there is a PHI constraint. It is now virtually impossible for a PHI breach to occur.</p>
<p>Purchase Orders for materials were sometimes informal and not properly approved, and often multiple managers would over order the same materials.</p>	<p>We now have centralised PO management, and stopped multiple staff from over ordering. All Purchase Orders are now approved by management, and exported or financial package.</p>
<p>Stock takes on materials (inventory) would not be performed often enough due to the difficulty in performing them. Often we didn't really know what our "estimated quantity" of materials was.</p>	<p>We can now perform stock takes by site, depot, or inventory category. The PDA can be used to perform stock takes or we can print stock take sheets and enter the "actual" values after performing the stock</p>

<p>Staff retention has always been an issue on our farms. Each time a staff member left, we would have trouble training a replacement.</p>	<p>take. ProducePak now gives the staff their work processes and instructions. When we have a new staff member, we simply show them how to use the small part of ProducePak that applies to their tasks, and ProducePak guides them through their work and alerts for any mistakes.</p>
<p>Often we would have nasty cash flow surprises where we had miscalculated the quantity of materials or used more materials during production due to environmental or pest reasons.</p>	<p>ProducePak gives us daily reports on our use of individual materials that is over the predicted (budgeted) amount. The cash difference can be seen quickly and appropriate action can be taken.</p>
<p>Implementing best practices was often time consuming and these practices were often forgotten by our staff if we didn't continually harass them into using the methods.</p>	<p>The Farm solution guides staff through their tasks and requires them to 'tick off' each process or duty as it is being done. This forces the staff to do things the way we want them done, and alerts us if they try to perform tasks incorrectly.</p>

Before & After Analysis (Packhouse Management)

The following responses were given by a ProducePak client when asked about each area of the business and how ProducePak has helped them to implement better management systems.

Before ProducePak Packhouse Management	After ProducePak Packhouse Solution Implementation
<p>Packing costs for each batch were often unknown. We pack for our own farm and other farmers, so we need to know how much it was costing for each farmer.</p>	<p>Using ProducePak Packhouse we can now see the packing costs of each batch, including labour and materials separately. We now use this information to determine the price we will pay the farmer for their goods if the produce was not from one of our own farms.</p>
<p>Packaging materials were unaccountable and often wasted materials were not properly accounted for.</p>	<p>Packaging material is now automatically consumed by ProducePak every time we create pallet contents; this keeps an automatic balance of materials. Wasted materials are now entered via stock take, so we know if there are any deviations.</p>
<p>Traceability through the packhouse was not</p>	<p>ProducePak allows us to use PDA's to scan</p>

<p>“100%” accurate. Sometimes we would mix produce from different origins (or farmers) and this would not be reflected on our paper based traceability.</p>	<p>barcodes (issued by ProducePak when we the produce arrives) to add it to the batch.</p>
<p>On occasion, produce would be added to a batch, and we didn’t know which batch it was added to.</p>	<p>We can mix as many origins of produce and still maintain absolute 100% traceability throughout the entire process.</p>
<p>Digging up traceability records could often take a few hours just for one batch, and was often not very accurate.</p>	<p>We also put a batch number on the finished product, if the consumer ever has a problem with the quality or traceability of the product, we can now produce a Batch Traceability Report instantly, which shows us full details of the origin and who packed it and when.</p>
<p>Management of raw produce was often prone to error, and occasionally unnecessary waste where produce was not packed in the correct order.</p>	<p>ProducePak allows us to easily see and report on all raw produce on hand, when we add it to a batch ProducePak suggests what produce should be packed first (maintaining FIFO); this feature can be overridden by management where necessary.</p> <p>We can now see if we have enough produce to pack our orders, and what the potential excess or shortage will be.</p> <p>We now experience virtually NO raw produce waste due to staff error.</p>
<p>Many activities in the packhouse would be written on paper or spreadsheets by packhouse staff, then later entered by administration staff. For example the dispatch process would be written down three times.</p>	<p>Information is entered only once now, directly into ProducePak. Most of this information was entered multiple times. The dispatch process is streamlined by allowing staff to use the PDA to scan the pallets that are being dispatched, and scanning them one final time at the physical point of truck loading.</p> <p>This PDA process replaces several paper documents, and now means our administration and marketing staff have real time access to information.</p>
<p>Labeling of incoming raw produce, pallets , and finished product was often inaccurate and makeshift. We were using a separate program to print barcodes, a spreadsheet for pallet labels,</p>	<p>ProducePak now prints our labels automatically at every step throughout the packhouse. The labels all have barcodes and human readable information. There are no more mistakes on labels in our</p>

and hand written labels for incoming raw produce. This resulted in many errors by staff, and the problem that the labels are not automatic and integrated into a traceability database.

packhouse, and everything is automatically generated such as pallet numbers, and stock arrival numbers.

Pallet management was suffering from inaccuracies due to our hectic packhouse environment often resulting in dispatch staff consigning pallets on a non FIFO basis.

During the dispatch process, ProducePak will suggest to staff which pallets should be added to which order. If the pallet does not match the orders specifications for quality or quantity, the staff member is alerted during the consignment process when they scan the pallet label.

We now have absolutely zero errors during consignment, and every day we can see the exact status of orders, allowing us to know if we can send staff home or not.

Quality control was often missed or not performed properly, and packhouse management would only find out about this at a later stage.

We can now perform QC using the PDA on the stock arrival process. We use a PC on a QC station in the packhouse to test finished product, and the PDA to perform QC on pallet dispatch.

We usually perform a QC on each outgoing pallet, on at least 12 random cartons form each batch, and on stock arrival (raw produce incoming).

The results are now quantifiable and we can see performance of individual packers and know what they need retraining for. All QC is now monitored easily by management and we can see if anything was missed.