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Bridging the Ebusiness Technology Gap in the NSW Nursery and Garden Industry

In this month's Nursery Paper NGINA Business Skills Development Officer, Bob Wynyard reports on recent work undertaken in developing E business solutions and training in the Nursery Industry.

Bridging the Ebusiness Technology Gap in the NSW Nursery and Garden Industry

1. Background

A 2009 industry supply chain review in Australia's nursery and garden industry confirmed the need to up-skill all industry sectors. It concluded that urgent action was necessary to improve efficiency, reverse declining profit margins, capture market opportunities and improve business sustainability. Importantly, adoption levels of Information and Communication Technology (ICT) in the industry were very low and a significant impediment to development of strong supply chain management.

In line with Nursery & Garden Industry Australia's (NGIA) strategic objectives and with the aid of a grant from the NSW Department of Education and Community's Skills Enhancement Program (SEP) an ebusiness project was initiated. SEP projects are designed to develop and deliver complementary training activities leading to broader skill development, improved business productivity and better job outcomes for individuals.

From the outset, the project focus was aimed to provide managers and employees of the many industry Small and Medium Enterprises (SME) with improved ICT skills. Through the enhancement of individual skill-sets, would flow; improved processes in stock ordering, invoicing, delivery, sales and payment, as well as identifying and preventing waste.

The project also presented the opportunity to provide a better understanding of how costs are constituted, resulting in the inclusion of an interim Stage 2. This stage focussed on reviewing, upgrading and simplifying costing activities in production nurseries, as well as complementing subsequent developments from the main project.

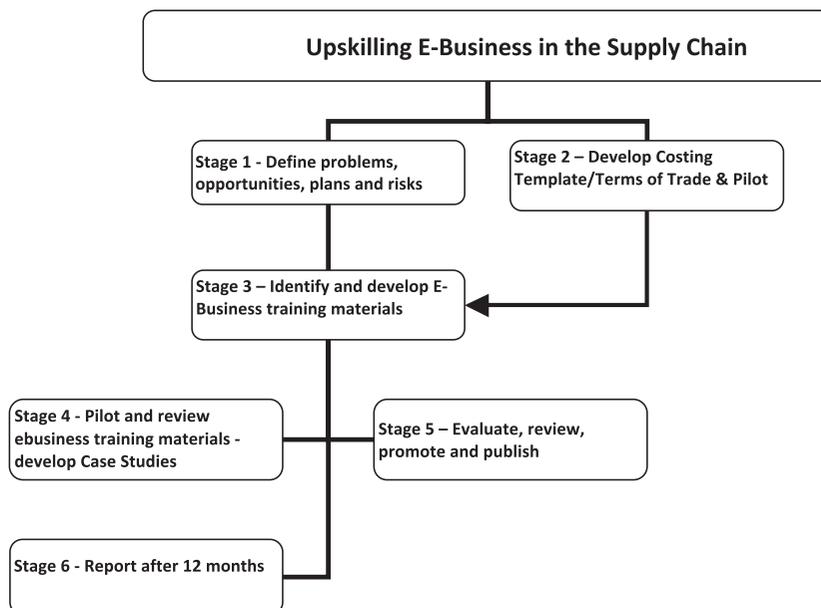
The project's first major task was to define the ebusiness skill shortages which formed the greatest impediment to improving productivity. Subsequent matching of the relevant units of competency chosen to fill the skill gaps

was then tested in a series of pilot workshops. Represented in these workshops were a range of industry owner/managers and employees. Subject to the final outcome of this stage and with any refinements made, NGINA would then be in a position to roll training out to industry and make it available nationally.

Key tangible objectives of the project include;

- A major overhaul of the nursery costing program including development of a workshop and associated resources.
- Building e-business skills and competencies across the industry through the development of a workshop, templates and resources.

Table 1 Summary of the 6 stages in the project



2. Ebusiness Skills a Must for Efficiency and Profitability

The primary objective of Stage 1 was research and gathering information for which Gerard McEvilly (Horticulture Supply Chain Services) was commissioned to assist. His work consisted of in depth interviews with 30 key industry players, scrolling through literally hundreds of research publications and producing a report identifying likely threats and opportunities. His initial observations identified the following key emerging patterns:

- **The challenge of getting up to speed on e-business practices is across industry, including production, retail, landscape, all other channels and end users.**
- **A common occurrence across the industry known as 'Monday Madness' describes the disorderly nature of weekly greenlife ordering, with little knowledge of stock-outs until delivery.**
- **Training targets are likely to be aimed at more willing 'ready adopters'.**
- **Lack of e-business preparedness will almost certainly compromise business success in the next 5 years.**
- **Promoting e-business involvement needs to focus on communicating cost benefits.**
- **Maintaining post-project momentum will need to focus on adoption of industry guidelines.**

More importantly McEvilly identified a broad training pathway based on eight key topics. Further refinement by a subcommittee and a cross section of growers using the criteria of 'most needed' and 'most achievable' resulted in the publication of the *"Better e-business Skills underpin Industry Supply Chain Blueprint"*, which included related skills listed below:

1. Step-wise introduction and development of e-business capability

SKILLS: Need and benefits of using e-technology; Introduction to technology used in the supply chain; Performing tasks across industry

2. Development of guidelines and protocols to maximise e-business efficiencies in the supply chain

SKILLS: Industry conventions; Protocols and gaining maximum efficiency; Understanding the supply chain.

3. Introduction of online stock availability

SKILLS: Writing electronic supply catalogues; developing online templates and ordering procedures.

4. Smarter inventory management

SKILLS: Inventory management; Stock control; Planning and forecasting.

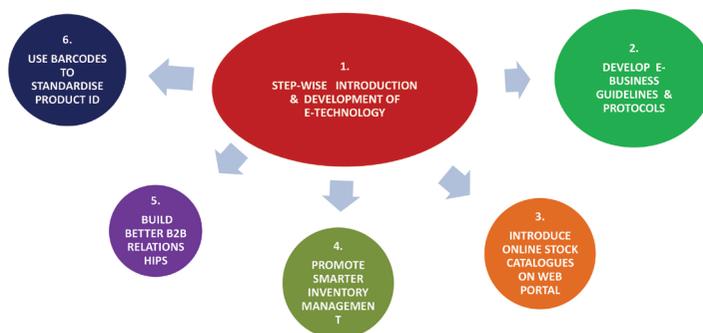
5. Effective communication between producer and consumer

SKILLS: Effective customer relationship management; Better B2B communication

6. Costs, benefits and implementation of barcoding

SKILLS: Implementation of stock ID; Electronic data interchange (EDI)

E-Business Skills Pathway in the NSW Nursery Industry Supply Chain
(NB. Size denotes relative importance – the numbers do not denote timing priority)

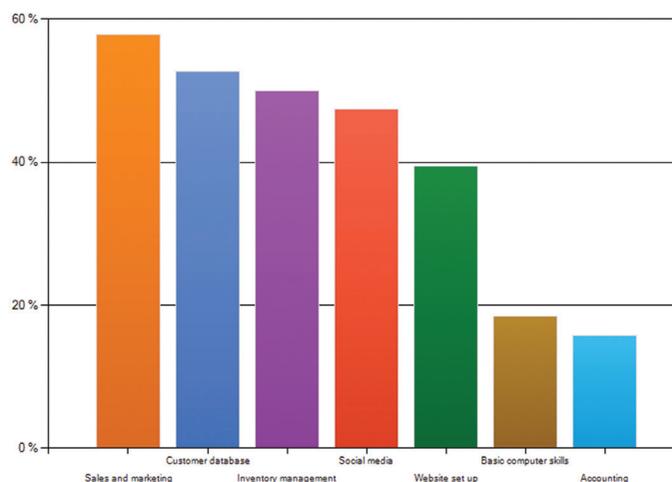


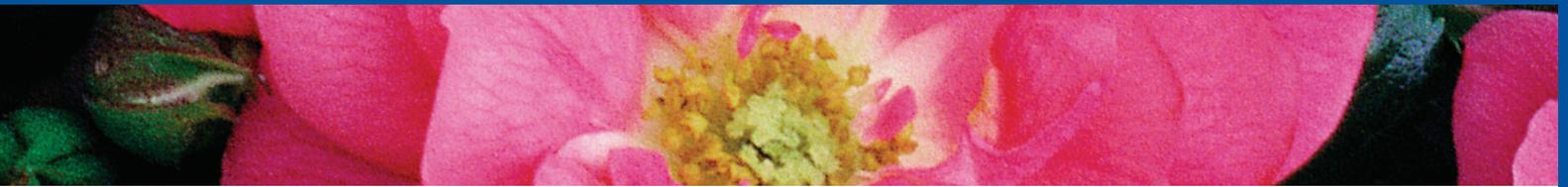
3. Management and Communication; Stronger from Improved Ebusiness Skills

A separate survey was conducted to gauge e-business proficiency. In general this supported the view that better e-business skills would result in better management and improved communication. Whilst this was conducted via Survey Monkey and the sample was small here are some of the key points:

- 90% of managers/owners are comfortable using computers
- 45% of staff have their own work email address.
- 60% of respondents have never used social media.
- Most respondents use computer/internet for invoicing, data storage, sales quotes and banking.
- When asked to rate their workforce skill levels, 'Accounting System' was the only category rated as 'good' by over half (52.6%) of the respondents.
- Cost, hardware/software required and time to set up new system were listed as the 3 major obstacles to improving electronic business skills.
- Businesses with websites seemed more aware of cost than all other groups.
- In order of priority the greatest needs for e-business skills improvements were in Sales and Marketing, Customer Database, Inventory Management and Social Media.
- 75% of all respondents have websites but 39% take 3 months or more to update them.

If your business needs to improve e-business skills, where should this be focussed?





4. Eureka! The True Farm Gate Cost of a Plant

Stage 2 of the project was a review of production costing. This involved a total rework undertaken by Andy Cameron (Nursery Management Systems) prior to rigorous testing at a pilot workshop and then subsequent review by workshop attendees. The key objective was to enable growers to accurately determine the cost of a plant before it leaves their nursery. This information enables more accurate decisions to be made on factors affecting profitability:

- Setting a selling price which returns a desired profit margin
- Evaluating production costs
- Improving productivity techniques
- Eliminating unprofitable lines.

Rather than being over analytical this system takes a more pragmatic approach, allowing grouping plants according to their size, growth characteristics and production requirements. As a starting point a grower may select all 140 mm pots and calculate the costs overall. They can then work back to look at specific crops that have different cultural requirements, or particular costs which appear to be excessive. Note that this component of the project is an Excel based Costing Calculator which (once key data is determined) can quickly arrive at the farm gate cost. The next step is to roll the workshop out to industry and workshops are already planned for NSW. It's worth noting that this Level 4 Unit of Competency can now be studied towards a Cert IV or Diploma qualification.

Quote from a NSW grower

"This is a must for every nursery business. It forces you to look at every part of the business and even allows you to calculate your productivity per hour. It's a business health check which is why it's so valuable."



5. Content Finalised for e-business Skills Training Program

Working in consultation with the Project Steering Committee (representing stakeholders) the next major step was to match needs to skills. Assistance from key staff from the logistics and IT faculty at Nirimba College in western Sydney was paramount in finalising content and materials for the delivery of four pilot workshops and a contract was signed with TAFE NSW - Western Sydney Institute (WSI). Three of the six priority Blueprint needs listed in section 2 above with were selected and delivery outcomes defined:

1. Step-wise introduction and development of e-business capability
TRAINING OUTCOME: The availability, benefits and application of current technologies to support efficiencies and productivity in nursery business operations
2. Development of guidelines and protocols to maximize e-business efficiencies in the supply chain
TRAINING OUTCOME: The development of protocols and standards of practice relevant to current market conditions and emerging trends and how this impacts on performance
3. Smarter inventory management
TRAINING OUTCOME: Creating a structured strategic framework to planning, forecasting and managing inventory appropriate to business needs.

The Units of Competency selected and contextualised to the industry were:

- | | |
|-------------------|--|
| BSBEU501A | Investigate and Design e-business Solutions |
| TLX4028A | Apply Knowledge of Logistics |
| ICAICT306A | Migrate to New Technology |

6. Delivery of Pilot Workshops

The first workshop was broad ranging touching on live inventories and the perceived difficulties in running them in production nurseries. A number of more common problems or opportunities were teased out and became the centre of attention in the next two workshops with great interest in the opportunities for more effective methods of B2B communication. This led to exploring a range of applications on offer with first-hand experience.

The second workshop had an in depth look at inventories and their management. It highlighted the difficulty of keeping an accurate inventory. It was apparent that some growers are becoming frustrated as demands of trading partners threaten to compromise profit. The reasons why accurate inventories are important include:

- Delivery of short or incorrect orders will steer your customer to more reliable suppliers.
- It's impossible to know if profits are real or not without an accurate inventory.
- Overstocking chews up cash which could be better used elsewhere in your business.
- Better control on theft and losses
- Knowing you have accurate information means you can trust your systems.
- Makes for more efficient stocktake and end of year process.
- Meets the needs of the ATO to ensure correct tax is paid.

A healthy ensuing discussion looked at stocktaking and the need for robust business management practices to deal with variances.

Perhaps the biggest opportunity ebusiness presents for small business however is the capacity for them to punch above their weight with cloud computing, smart phones and the access to so many new applications. During the workshops participants either trialled or had demonstrations on many of these and other aids to business improvement including: MailChimp, DropBox, CRM, Office HQ, CMS Platforms, Search Engine Optimisation, CRM,



For more information

Nursery paper November 2009 *Supply Chain Management holds the key to the viability of nursery enterprises*. Gerard McEvilly, Horticulture Supply Chain Services and Tom Rafferty, Supply Chain STO

EDI and many others. Following the four 6 hour pilot workshops each participant is followed up for a further 4 hour face-to-face mentoring session culminating in an Action Plan.



Next Steps for Ebusiness Skills Program

The completion of the pilot workshops capped off nearly two years of groundwork involving many people across industry. Once the current student assessments are completed and a report is received from Nirimba College, a series of workshops will be rolled out to industry, although it is not yet decided what form these will take.

Finally

It is worthy to note that in order for the industry to become more efficient, many issues need to be addressed both vertically and horizontally. Many listed below are not ebusiness problems but if not addressed will continue to have a profound effect on ongoing efficiency:

- A better understanding is needed of how cost activities (especially labour) are made up and could be deployed more effectively.
- The lack of effective live inventories is compromising the ability of many SME to satisfy customer needs and operate efficiently.
- Modification and improvement is needed in the many nursery stock handling processes– in fact poor systems and procedures severely compromise e-technology.
- Retraining nursery people to be IT experts rarely works – better to set up the right system at first attempt.
- Cloud computing and advanced software applications mean small businesses can perform well above their size in many areas.
- More effective industry communication either are widely available with a raft of affordable applications either internally, business-to-business or business-to-customer
- There is a role for industry organisations to become repositories for access to ebusiness information, applications and templates.