

Final report

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Feasibility Study of e-learning Training

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1 Feasibility study of e-learning training

1.1 Description of the project

Across the Australian red meat industry, regulatory and legislative requirements for workplace training in areas as diverse as occupational safety to workplace bullying are increasing. In addition to the minimum levels of workplace training required by legislation, there are also a number of other training programs that are regularly delivered to employees of red meat companies. As a result, the costs incurred by red meat businesses have increased with the volume of training delivered.

This project investigated the potential to decrease the costs associated with delivering some of this training by using an online training and delivery program known as e-learning. This pilot project then investigated the acceptance of e-learning by employees, and identified any change management requirements as well as barriers to be overcome to gain acceptance.

The objectives of this project were to:

1. Implement a pilot project for assessment of e-learning platforms in employee training;
2. Establish the level of cost savings, improved data efficiencies and improved communication effectiveness achieved by utilising e-learning mediums;
3. Determine the degree of acceptance and the extent of adaptation to e-learning systems for employees; and
4. Improve the awareness of employee of their lawful obligations whilst at work.

1.2 Units included as part of the pilot

- **OH&S for the Australian Industry** – This unit provides employees and employers with general knowledge of the legal requirements and basic principles and practices relating to OHS in their work environment.
- **Sexual Harassment** - This unit is essential for all employees to understand their legislative obligations according to the Equal Employment Opportunity laws. It describes the behaviours that constitute discrimination and harassment in the workplace, and most importantly, what you should do if you or a colleague should be exposed to any discriminatory behaviour.
- **Bullying** - This unit aims to build a general awareness of your obligations under the law. It describes what constitutes bullying in the workplace, what laws protect against such behaviour, and how to seek assistance should you feel you are the victim of bullying in the workplace. It is also essential for employers in order to understand how to deal with complaints of bullying.

- **Equal Employment Opportunity and Non – Discrimination** - This unit is essential for all employees to understand their legislative requirements according to the Equal Employment Opportunity laws. This course is designed to encourage behaviours and workplace practices that support a culture that is fair, equitable, and free from discrimination. The user will become familiar with the behaviours that constitute discrimination and harassment in the workplace, and most importantly, what you should do if you or a colleague should be exposed to any discriminatory behaviour.
- **OH&S within an Office Environment** – This unit provides employees and employers with general knowledge of the legal requirements and basic principles and practices relating to OHS in their work environment.
- **Privacy** – This unit aims to help all employees understand your obligations with regards to the collection, storage and disclosure of personal information.
- **Ethics & Conduct** – This unit aims to provide all employees with guidance and resources to help you make the right choice if you ever feel pressured to make an unethical choice at work. It will provide you with an understanding of how to behave and conduct yourself in the workplace. The Code of Conduct provides an overarching standard that clearly outlines expectations of acceptable conduct for employees at all levels and third parties involved in performing duties or acting on the company's behalf.

2 Method used to deliver e-learning to employees

Participants were separated into two groups, with each group being allocated a new compliance unit to complete every second month. Units were allocated by the e-learning administrator on the first of every month.

Participants were informed that they had been allocated new learning via an email from e-learning. This email informed the participant of the unit they had been enrolled in, the due date, provided a link to the internal e-learning website and a reminder of the participant's username and password for login.

Each participant had an individual account for e-learning which was separated into four sections:

- **My Learning** outlines the units the participant has been enrolled in, due date and the status of the unit (not attempted/ incomplete/ completed);
- **My Results** presents the participant's results achieved for each of the completed units;
- **My Details** allows the individual to update their details and change their password; and
- **Help** directs the participant where to go for help with the system.

Participants were given one month to access and complete each unit online via their individual account. The participant navigated through the units which were interactive, posing questions throughout and providing scenarios for the learner to consider. Once the participant completed each of the sections contained in the unit, they were then given access to the assessment section. A pass mark of 80% in the assessment was required for the unit to be considered complete. This pass mark of 80% was set by Learning Seat, the e-learning system host and provider.

Once a participant was deemed competent in a unit, a certificate of completion was sent to the participant via email.

Participants and their managers were sent reminder emails of their learning (if not already completed) at a number of stages both before and after the due date.

3 Method used to measure e-learning system effectiveness

At the completion of the 7 compliance package units, a training feedback survey was completed via the e-learning system by participants involved in the pilot, to gain participant feedback in relation to acceptance of and adaptation to the e-learning system, as well as participant's perceived awareness of the content retained from training sessions.

To further assess participant awareness of lawful obligation and liability, a 20 question multiple choice retention assessment was developed from the compliance units involved in the pilot and was completed by each participant at the completion of the pilot. Participants were given one attempt only to achieve a minimum pass mark of 80% on the retention assessment. The pass mark of 80% was set as this had been the pass mark used throughout the pilot.

4 Metrics

Specific targets set for the pilot included:

- 101 employees trained in a Compliance Package containing 7 units at a cost of < \$50/ participant/ unit (excl cost of labour for on line training time);
- The e-learning training medium will be more cost effective than face to face classroom training;
- The system will be accepted by 80% of participants; and
- 80% of participants will recall the information to a retention level of 80%.

Based on the results of the training feedback survey, the retention quiz and reports from the e-learning system, the following metrics were gathered to assess the effectiveness of the system:

4.1 Target financial metrics – cost per participant per unit (\$)

- Set up costs - Cost/ participant/ unit
- Operating costs – Cost/ participant/ unit
- Administration costs - Cost/ participant/ unit
- Assessment costs (survey/ quiz) – Cost/ participant
- On line training time - Hours/ participant/ unit

Overall economy:

- **Cost** (set up cost + operating cost + administration cost + assessment cost) / participant/ unit
- **On line training time/ participant/ unit**

Face to face classroom training - cost/ participant/ unit

4.2 Target operational metrics – overall learning effectiveness(%)

- Acceptance rates – unit delivery medium (satisfactory/ unsatisfactory)/ participant
- Completion rates - % completion/ participant
- Awareness/ retention rates – % retention/ participant

Overall learning effectiveness – %

Overall learning effectiveness = (Average acceptance rate x 30%) + (Average completion rate x 10%) + (Average retention rate x 60%)

4.3 Target technical metrics – communication efficiency

- On-line time / participant / unit
- On-line frequency & location / participant / unit

5 Results of target metrics

All figures are based on 101 participants.

5.1 Financial metrics – cost per participant per unit (\$)

- Set up cost – one off cost of \$14.65 / participant / unit
- Operating costs – \$25.17 / participant / unit
- Administration costs – \$1.61 / participant / unit
- Assessment costs (survey/ quiz) – one off cost of \$2.21/ participant/ unit
- On line training time – average 51 minutes training time/ participant/ unit (total 6 hours training time/ participant)
- **Overall economy - \$43.64/ participant/ unit**

- 51 minutes on line training time/ participant/ unit

- **Face to face classroom training – \$200.00 (plus expenses)/ participant/ unit**

5.2 Operational metrics – overall learning effectiveness (%)

- Acceptance rate - The results of the training feedback survey showed that 97% of people accepted the e-learning system, rating the system overall as satisfactory or above with 75% of participants rating the e-learning system as either good or excellent. 82% of people stated that they would consider completing other types of learning via this type of medium.
- Completion rate - 100% completion rate / participant
- Participant awareness/ retention of unit content – Survey results showed that 70% of participants rated their overall knowledge of the content as good or excellent and 72% of participants stated that they were applying the knowledge they had learnt in the workplace. The results of the retention assessment however showed a greater percentage of people retaining the information with 88% of participants achieving the pass mark of 80% or greater.

Average acceptance rate = 71
Average completion rate = 100
Average retention rate = 90

Weightings:

Acceptance rate – 30%
Completion rate – 10%
Retention rate - 60%

Overall learning effectiveness = (71 x 30%) + (100 x 10%) + (90 x 60%)

Overall learning effectiveness – 85.3%

5.3 Technical metrics – communication efficiency

- On-line time – 51minutes/ participant/ unit (based on stated durations of courses by e-learning)
- On-line frequency & location - 25% of the time people logged in on more than one occasion to complete a unit. The results of the training feedback survey showed 83% of participants completed most of their training at work during their normal work hours. 17% of people completed some or all of their training outside of work.

6 Project results

The results have shown that the pilot project has met the specific targets as set at the beginning of the project and stated below:

- 101 employees trained in a Compliance Package containing 7 units at a cost of <\$50/ participant/ unit (excl cost of labour for training time);
- The e-learning training medium will be more cost effective than face to face classroom training;
- The system will be accepted by 80% of participants; and,
- 80% of participants will retain the information.