



final report

Project code:	P.PIP.0372
Prepared by:	Belinda Byrne
	JBS Australia Pty Limited
Date submitted:	24 June 2014

PUBLISHED BY Meat & Livestock Australia Limited Locked Bag 991 NORTH SYDNEY NSW 2059

Evaluation of the Alchemy System to support ongoing implementation of innovation systems within JBS Australia

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication.

This publication is published by Meat & Livestock Australia Limited ABN 39 081 678 364 (MLA). Care is taken to ensure the accuracy of the information contained in this publication. However MLA cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the publication. You should make your own enquiries before making decisions concerning your interests. Reproduction in whole or in part of this publication is prohibited without prior written consent of MLA.

Executive summary

The following report details outcomes on a case study of the implementation of helmets across two entire JBS operations and reports on the effectiveness of using the JBS Alchemy system to delivery training in potentially a significant change management area. The project was undertaken in three phases with initially assessing feedback on using Alchemy as a traniing method, then design and implementation of a case study initiative (implementing helmets in all operational areas) and evaluation after implementation to measure successes of using Alchemy.

Phase 1 – (i.e. Milestones 1–3)

Three pilots have been evaluated with feedback from over 500 JBS employee to date. Positive fedback has been received for the three pilots of the system which signifies the successful conclusion of the three pilot modules:

- JBS Faces of Innovation Media/Content Development
- JBS Faces of Innovation Deployment
- JBS Faces of Innovation Evaluation

The current pilot Implementation phase has been completed and included the following scope of JBS Faces of Innovation:

- Intended audience: all JBS employees (7,300 people).
- Key stakeholders in innovation at JBS to speak about our history with innovation, where we
 are going and what we are looking to achieve.
- To include JBS Innovation network members including Innovation Managers and key JBs senior managers with key messages about what innovation means to JBS and how important it is for JBS.
- Include examples of employee ideas that have been implemented.
- Will include how employees can engage in putting up ideas and how they might be involved in innovation right across the business.
- The content will be developed and edited by JBS and delivered through the Alchemy system to all sites.

JBS presented the three pilot Alchemy courses below to all salaried and administrative staff Australia wide (approximately 500 people). The purpose of this exercise was to raise awareness of how we interact with other people and to gauge how people responded to having this information delivered to them via Alchemy.

Phase 2 - Pilot Implementation of Embracing Changes in the Workplace – leading your team (i.e. Milestones 4-6)

Andrew Moore of Moore Development prepared a module for Alchemy, *Managing Change*, for delivery to JBS staff members in leadership roles. The purpose of this training was to broaden the participants understanding of the change management process, and how to guide their teams through the introduction of change successfully.

Phase 3 - Evaluation of the Alchemy system (i.e. Milestone 7)

The primary purpose of this report is to present the findings – from a survey and focus groups – that provide a baseline measure of how effectively change is managed at the JBS JBS Plant 1 and JBS Plant 2 meat processing plants. This report fits into a larger scale project, which aims to evaluate the effectiveness of Alchemy – an online training platform – in training leaders from the Australian division of JBS. A pre- and post-implementation ("Time 1" and "Time 2" respectively) assessment is required to evaluate the effectiveness of Alchemy in training leaders to apply learning objectives.

For this to occur, JBS would like to assess how effectively Alchemy trains leaders in applying change management principles. The pre-implementation change process (T1), involved the introduction of safety helmets for all employees. Surveys were used to evaluate the effectiveness of the organisation's ability to manage this change process at two JBS plants: JBS Plant 1 and JBS Plant 2. Following the completion of the surveys, focus groups were carried out to validate and further explore the survey data.

The primary purpose of this study (phase 3) is to present the findings of the survey and focus groups, which provide a baseline measure (T1) of how effectively change is managed at the JBS Plant 1 and JBS Plant 2 meat processing plants. This study focuses on the change management processes surrounding the introduction of helmets at the JBS Plant 1 and JBS Plant 2 meat processing plants. The findings will highlight indicators of successful change management, as well as areas for improvement.

Table of Contents

Ex	ecutive summary	2
1.	Background	5
2.	Project objectives	5
3.	Project outline	5
4.	Experimental work	6
5.	Findings	7
6.	Progress against Milestones	14
7.	Commercialisation of findings	15
Ар	pendix A – Analyses Criteria	18
Ар	pendix B – Focus group running sheet	21

1. Background

JBS Australia is continuing to develop and implement their innovation resources and build capability through a new Stage 2 Collaborative Innovation Strategy program (CISP) with MLA. The current project proposes to evaluate a new training delivery technology across a small suite of pilots to assist in messaging and inducing behavioural changes, specifically through the JBS leadership programs. The business challenge or opportunity is the need to enhance training and development programs to improve outcomes across the JBS business pillars – safety, yield, turnover, cost and quality. There is also a need to see a positive shift in employee morale as this will have obvious flow on benefits across all business pillars, and address turnover. Alchemy is an innovative solution that has not yet been tested in the Australian meat industry, and uniquely offers a mechanism to engage the JBS workforce in the innovation program in an entertaining and interactive way and to support the adoption of innovations as they are rolled out across the JBS business areas and sites. This will be discussed in more detail through the following application form.

This project involves the piloting of Alchemy as an enabler to the JBS innovation system as well as overall evaluation of the effectiveness of the Alchemy system in the Australian workplace environment. Alchemy is a content delivery platform that will enable JBS to deliver training more effectively through the use of entertaining and interactive sessions. This will allow for simple and instant assessment of employee comprehension of the training outcomes. JBS is proposing that Alchemy becomes one of the key tools it uses to support the continued implementation of its innovation program and importantly the engagement of its workforce. Alchemy will be evaluated in this project across three areas related to ongoing implementation and embedding of innovation systems within JBS Australia. Key messages around the importance of this project. Alchemy will also be used as a component of an overall change management program to support disruptive technologies such as the Bordertown LEAP project as well as a training and development tool to support the adoption of new innovations.

The project proposes to evaluate Alchemy's effectiveness as a training and development tool for JBS and to investigate and trial the ability for Alchemy to be used as a change management tool to support the JBS innovation program (i.e. CISp). A third party independent company (Moore Training) with the required skills and capability will be commissioned to conduct the required evaluation at the conclusion of the project.

2. Project objectives

The objectives of the project are :

- i. To evaluate Alchemy's effectiveness as a training and development tool for JBS and by extension of the Australian industry
- ii. To investigate and trial the ability for Alchemy to be used as a change management tool for JBS and by extension of the Australian industry
- iii. To investigate and trial the ability for Alchemy to support the JBS innovation program and by extension of other CISp partners

3. Project outline

The scope of the project is that JBS will develop Alchemy modules from scratch to meet Australian regulatory requirements with more personalised messages from the faces of JBS in the Australian business. JBS will also develop new materials in innovation to deliver in key leadership programs to assist with continuing to embed innovation across the business. These materials will be developed in

the JBS business using locations and environments very similar to that which the individual will be working in (e.g. JBS sites will be used for video footage). JBS's overall implementation plan is that all classroom training will be delivered via Alchemy at all processing sites, feedlots, distribution centres and the Corporate Office, with the first priority being employee inductions once this evaluation is completed.

JBS USA uses an online training platform – Alchemy – that aims to support food processors and manufacturers to meet training requirements. The overarching purpose of this project is to evaluate the effectiveness of Alchemy in training leaders from the Australian division of JBS. A pre- and post-implementation assessment is required to evaluate the effectiveness of Alchemy in training leaders to apply learning objectives.

For the evaluation process, leaders within the organisation will be trained to effectively manage change. Accordingly, the pre- and post-implementation assessments will analyse the organisations ability to manage change associated with the introduction of a new piece of safety equipment. The pre-implementation change process, referred to as "Time 1" (T1), involved the introduction of helmets for all employees. Surveys were used to evaluate the effectiveness of the organisation's ability manage this change process at two JBS plants: JBS Plant 1 and JBS Plant 2. Following the completion of the surveys, focus groups were carried out to validate and further explore the survey data.

4. Experimental work

The components of the project are as follows:

4.1 Pilot Implementation (Phase 1) of JBS Faces of Innovation (i.e. Milestone 1-3)

- Intended audience: all JBS employees (7,300 people).
- Key stakeholders in innovation at JBS to speak about our history with innovation, where we are going and what we are looking to achieve.
- To include JBS Innovation network members including Graham Treffone, John Berry, Brent Eastwood, Anthony Pratt, and Sam McConnell with key messages about what innovation means to JBS and how important it is for JBS.
- Include examples of employee ideas that have been implemented.
- Will include how employees can engage in putting up ideas and how they might be involved in innovation right across the business.
- The content will be developed and edited by JBS and delivered through the Alchemy system to all sites.

4.2 Pilot Implementation (Phase 2) of *Embracing Changes in the Workplace – leading your team (Milestone 4-6)*

- Intended for Managers / Forepersons / Supervisors / QA Officers / Trainers / HR / Leading Hands (approximately 500 people)
- Delivered in the context of JBS what we have done in the past, what worked well and what didn't work. Review of impacts to workforce with implementation of past and present new disruptive technologies such as Leap.
- To include information on past MLA projects involving deployment of new technologies e.g. spray chilling.
- Overview of change management principles and how to successfully lead a team through change
- The content will be developed and edited by JBS with the assistance of an independent third party provider. It will be delivered through the Alchemy system to all sites.

4.3 Evaluation (Phase 3) of the Alchemy system (Milestone 7)

An external third party (Moore Training) will complete benchmarking and evaluation of this project. JBS is currently identifying a provider and as such a maximum budget is being requested as part of this application. The evaluation will evaluate the following aspects:

- Ensure that training delivery mechanisms that are effective within the US industry work within the Australian context. There are several key differences which must be investigated e.g. more cultures and languages
- Understand how much of the current content is relevant / appropriate for the Australian industry. Investigate what needs changing and what else needs to be developed for the system to be effective?
- Trial the system to ensure that there is an effective level of employee engagement (i.e. they like it)
- Measure the effectiveness of the units delivered (i.e. it works has had an impact on job performance)
- Understand opportunities and challenges for site specific / site based content in terms of development and delivery

The survey was designed around Kirkpatrick's training evaluation model¹. It aims to provide a holistic evaluation of the effectiveness of Alchemy in training leaders within the organisation to manage change at Time 2 (T2; post-implementation). This model is comprised of four levels: reaction, learning, behaviour and results. For T1, responses that demonstrate employees' "reaction" to the change are of most relevance. These questions measure how people reacted to the process, which is particularly important for understanding how well the change process was perceived by employees. The survey comprised of eleven questions, which are detailed below. For detailed analyses criteria, refer to the supporting documents (see Appendix A-C).

5. Findings

5.1 Pilot Implementation (Phase 1) of JBS Faces of Innovation (i.e. Milestone 1-3)

The current report shows progress to date (i.e. Milestone 1–3):

- JBS Faces of Innovation Media/Content Development
- JBS Faces of Innovation Deployment
- JBS Faces of Innovation Evaluation

JBS presented the three pilot Alchemy courses below to all salaried and administrative staff Australia wide, the course was allocated to approximately 500 people. The purpose of this exercise was to raise awareness of how we interact with other people and to gauge how people responded to having this information delivered to them via Alchemy.

The content of the courses can be found on-line:

- 1. <u>Balancing Tasks & Relationships</u> (See screenshots Photos 1 & 2)
- 2. Introduction to Leadership Skills
- 3. Listening as a Leader

¹ Kirkpatrick, D.L. (1994). Evaluating training programs: The four levels. San Francisco: Berret-Koehler; Kirkpatrick, D.L. (1996). Evaluation. In R.L. Craig, 7 L.R. Bittel (Eds.), Training & Development Handbook. American Society for Training and Development, New York: McGraw-Hill Book Co.

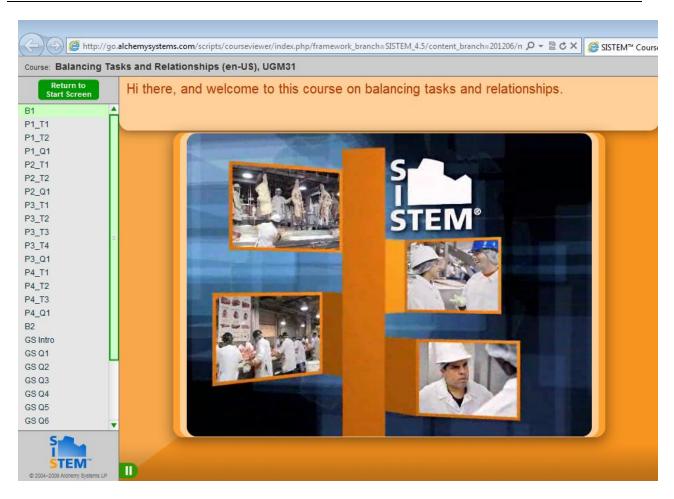


Photo 1. Screenshot of online course materials presented on Balancing Tasks & Relationships.

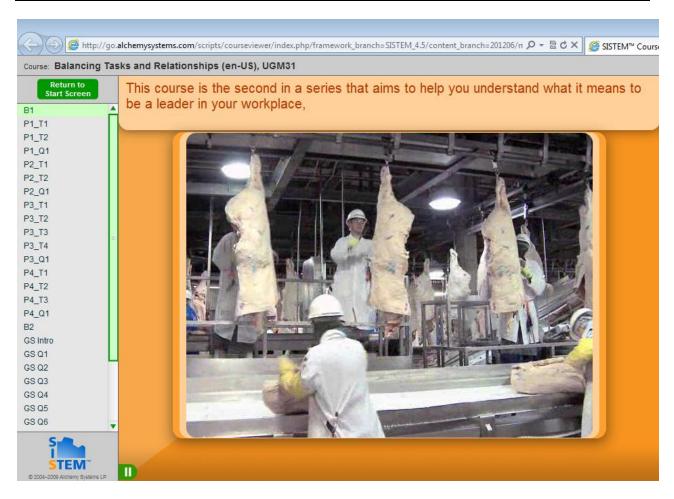


Photo 2. Screenshot of online course materials presented on Balancing Tasks & Relationships.

Below is a snapshot of the generally positive feedback we received and links to the courses JBS delivered. These courses were filmed at the JBS Global Greeley plant in the US.

	% Strongly Agree	% Agree	% Neither agree nor disagree	% Disagree	% Strongly disagree
Q 1. The training was relevant to my job	52.96%	40.00%	6.48%	0.28%	0.28%
Q 2. The training met the objectives	46.76%	49.86%	3.38%	0.00%	0.00%
Q 3. I will be able to apply the knowledge learned	52.39%	44.23%	3.10%	0.28%	0.00%
Q 4. There was enough time allowed	60.56%	36.06%	2.25%	0.85%	0.28%
Q 5. The remote was easy to use	62.25%	33.52%	3.10%	0.85%	0.28%
Q 6. The material kept my interest	41.13%	50.70%	6.76%	1.13%	0.28%
Q 7. The material presented was relevant and well structured	46.76%	49.86%	3.38%	0.00%	0.00%
Q 8. The content was clear and easy to understand	54.65%	43.66%	1.69%	0.00%	0.00%
Q 9. The visual, audio and interactive style kept my interest	48.17%	45.92%	4.51%	1.41%	0.00%
	Very Good	Good	Average	Poor	Very Poor
Q 10. How do you rate the training overall	51.83%	45.63%	2.54%	0.00%	0.00%

5.2 Pilot Implementation of Embracing Changes in the Workplace – leading your team (Phase 2; Milestones 4-6)

After completing the *Managing Change* training session, some feedback from attendees included;

- That explaining to workers why change is needed in the first place was most important.
- That the need for change should be backed up by real evidence or statistics as this shows that change is not because the company can but because change is needed.
- That change is often proactive in addressing safety.
- Change may give the company a competitive edge in the industry.
- Unions and safety reps should be consulted prior implementing the changes.
- They believed that change could be implemented by trialling first.
- That a set date for the overall implementation of the change should be agreed to by all the collaborators.
- Staff agree that they themselves should be positive about the change when talking to the workers.

5.3 Evaluation of the Alchemy system (Phase 3; Milestone 7)

5.3.1 Evaluation 1 (JBS Plant 1)

One hundred and four employees completed either an online or paper copy of the survey. Also, four groups of approximately six employees participated in semi-structured focus groups, which aimed to explore the survey data further and validate conclusions drawn about the survey findings. The key indicators of success and areas for improvement that were identified are summarised below (Refer Appendix D for detailed findings).

A summary of the reported findings is detailed below, followed by a table outlining the indicators of success and areas for improvement in the change process.

Summary of findings were as follows:

- A majority of respondents have worked at JBS Plant 1 between 1 and 5 years.
- Most believe that the helmets were introduced for enhancing safety and feedback from the focus groups was consistent with this. However, some believe that the underlying reason was to bow to pressure from JBS USA; to reduce risk of compensation claims, or in response to an isolated incident.
- In the survey, people reported varied feelings towards wearing the helmet. Similarly, focus group participants reported varied feelings towards the helmet. Most concerns relate to organisation decisions regarding the helmet accessories (e.g., nametags and sweatbands).
- A slight majority of survey respondents indicated that wearing the helmet at work did not make them feel safer.
- There were inconsistencies between survey and focus group findings in relation to when employees became aware of the helmets. Most survey respondents reported that they first became aware of the helmet on the same day that the helmets were distributed. However, focus group participants reported varied timeframes in which they became aware of the change, from varying sources (formal and informal).
- A majority of respondents indicated that there was not enough communication about the helmets, despite the numerous communication channels reported in the previous item.
- Findings show that in most cases forepersons did not assist their team with the helmet. Responses were mixed in relation to how comfortable respondents felt talking to their foreperson about problems with the helmet. The latter finding may reflect distinct subcultures within the organisation; whereby some teams have established an open relationship with their foreperson, whilst others do not feel comfortable discussing problems with each other.
- Slightly more respondents reported having no problems with the helmets, compared with those who did.
- In response to items relating to how the foremen listened to and engaged with their team about the change, most people responded with "none of the time" or "not applicable"
- Respondents reported varied perceptions about how their co-workers feel about the helmet.

• A majority of respondents communicated with their colleagues about problems with their helmet, while most did not communicate with their foreperson.

Indicators of success and areas for improvement in the change process were as follows:

WHAT IS WORKING WELL?	WHAT COULD BE IMPROVED?		
 Established, formal communication mechanisms (e.g., meetings, committees) 	 Consistent and systematic communication about the change at all levels of the business 		
 The variety of communication mediums (e.g., notice board, payslips, meetings) 	 Dissemination of communication from formal channels to workers 		
	 Within team communication about the change between foremen and team members 		

- Empowerment of foremen to support and communicate with their teams through the change
- Openness to feedback and following through with action

5.3.2 Evaluation 2 (JBS Plant 2)

Sixty eight employees completed an online survey. Also, four groups of approximately six employees and one group of supervisors participated in semi-structured focus groups. These sessions aimed to explore the survey data further and validate conclusions drawn about the survey findings. The key indicators of success and areas for improvement that were identified are summarised below (Refer Appendix E for detailed findings).

A summary of the reported findings is detailed below, followed by a table outlining the indicators of success and areas for improvement in the change process.

Summary of findings were as follows:

- A majority of respondents have worked at JBS Plant 2 between 1 and 5 years.
- Most believe that the helmets were introduced for enhancing safety and feedback from the focus groups was consistent with this. However, no one was able to identify who had communicated this information, instead they said it was simply assumed knowledge.
- In the survey, people reported varied feelings towards wearing the helmet. Similarly, focus group participants reported varied feelings towards the helmet. However, a majority of people appears indifferent towards wearing the helmet itself, with the most concerns relating to helmet accessories (e.g., earmuffs and sweatbands) and how relevant the helmet was to particular work areas.

- A majority of survey and focus group respondents feel that wearing the helmet at work makes them feel safer. The few who did not reported that it was a hindrance to their type of work but they understood why others should wear the helmet
- There were inconsistencies between survey and focus group findings in relation to when employees became aware of the helmets. Most survey respondents reported that they became aware of the helmet 1 month prior to the distribution. However, focus group participants reported varied timeframes in which they became aware of the change, with most reporting that "rumours" were the primary source of information. Supervisors disagreed with these reports, indicating that all employees were informed during 'production meetings'. However they did agree that the process was too rushed.
- A majority of respondents indicated that there was enough communication about the helmets "most of the time" or "some of the time". Inconsistent with survey findings, participants indicated that there was insufficient top-down communication.
- Findings show that most people felt comfortable approaching their foreperson to discuss concerns about the change; however, most people reported not receiving any assistance with the helmet from their foreperson. Both survey and focus group respondents who did experience problems with their helmets reported similar issues including: earmuffs, temperature and interfering with work.
- Slightly more respondents reported having no problems with the helmets, compared with those who did
- Most people reported that their foreperson were listening to and engaging with their team about the change, and when applicable their foreperson was able to fix helmet problems or at least explain why they couldn't
- The findings revealed that most people perceive that their colleagues do not mind wearing the helmets.
- Most people indicated that they discussed problems with their co-workers "some of the time", whereas, most reported sharing these problems with their foremen "none of the time". However, these findings are not concerning, as there was still a substantial number of people who did report communicating with their foremen

Indicators of success and areas for improvement in the change process were as follows:

WHAT IS WORKING WELL?

- People appreciate the organisation's need to comply with national standards, and therefore understand the need for the helmet
- People feel comfortable discussing problems and concerns with their foreperson and co-workers
- Many supervisors were very involved in supporting their team after the distribution of the helmets

WHAT COULD BE IMPROVED?

- Frequency and format of top-down communication so that it reaches all employees
- Utilising established communication channels
- Empowerment of supervisors to support their teams through change
- Consistency implementing change across departments
- The planning and organisation of both the communication and implementation process

6. Progress against Milestones

The following table (Table 1) shows progress against Milestones

Table 1. Progress against Milestones.

Milestones	Provider ²	Status
1 JBS Faces of Innovation – Media/Content Development	JBS Australia Pty Ltd	Completed
2 JBS Faces of Innovation – Deployment	JBS Australia Pty Ltd	Completed
3 JBS Faces of Innovation – Evaluation	JBS Australia Pty Ltd	Completed
4.1 Change in the Workplace – Media/Content Development	Moore Training & Development Pty Ltd	Completed
4.2 JBS Change in the workplace - Evaluation	JBS Australia Pty Ltd	Completed
5 Change in the Workplace - Deployment	JBS Australia Pty Ltd	Completed
6 Change in the Workplace - Evaluation	JBS Australia Pty Ltd	Completed
7.1 Full Evaluation by third party	Moore Training & Development Pty Ltd	Completed
7.2 Full Evaluation by third party	JBS Australia Pty Ltd	Ongoing

The second JBS case study on fall protection in required operations areas has been implemented and in the final stages of evaluation. The following includes a detailed account of

the implementation of a major change management initiative (i.e. helmets in all operations areas). The second case, while complete, will be included in a latest version of the report.

7. Commercialisation of findings

7.1 Evaluation 1 (JBS Plant 1)

The key findings of this report have implications for JBS in deciding whether Alchemy is an effective training mechanism. This report has highlighted key areas for improvement at JBS Plant 1, which will be measured at T2 following the introduction of another "change" (piece of safety equipment). If the findings show that leaders are applying more effective change management principles, such that these identified areas for have improved, it would suggest that Alchemy has been effective.

7.2 Evaluation 2 (JBS Plant 2)

The key findings of this report have implications for JBS in deciding whether Alchemy is an effective training mechanism. This report has highlighted key areas for improvement at JBS Plant 2, which will be measured at T2 following the introduction of another "change" (piece of safety equipment). If the findings show that leaders are applying more effective change management principles, such that these identified areas for have improved, it would suggest that Alchemy has been effective.

8. Implications and conclusions

8.1 Pilot Implementation (Phase 2) of *Embracing Changes in the Workplace – leading your team (Milestone 4-6)*

The contribution of the project to the overall success of the Innovation Strategy will be determined by:

- More streamlined introduction of new technology, such as the LEAP system at Bordertown, through targeted supervisor training and clear communication channels for employees (modules in Alchemy relating to what new technology means for a team / area)
- Decrease in workplace injuries through improvements in clarity and consistency of training
- Increased retention through greater engagement in training
- Clearer messaging across the business relating to the innovation program
- Greater engagement from the workforce in the innovation program

At the conclusion of the project an industry report will be developed for wider distribution. Separate confidential and non-confidential versions of the Final report may be provided if a single report cannot be published on MLA's website. The final report for this project (once approved by JBS) will be available to the wider red meat industry. Dissemination to the wider industry including all current CISp companies will be ensured by JBS presenting the outcomes of the project to the Innovation Network Meeting as well as an industry version of the final report. It is agreed that a representative of JBS makes a presentation to CISP companies at an event such as the Innovation Managers Network to describe how successful the project has been for JBS in supporting their innovation program and outlining some of the lessons learnt.

8.2 Pilot Implementation of Embracing Changes in the Workplace – leading your team (Phase 2; Milestones 4-6)

8.2.1 Evaluation

Based on informal feedback after the training session, attendees had a broader understanding of the change management process and the need for clear communication throughout the process.

8.3 Evaluation of the Alchemy system (Phase 3; Milestone 7)

8.3.1 Evaluation 1 (JBS Plant 1)

The key findings of this report have implications for JBS in deciding whether Alchemy is an effective training mechanism. This report has highlighted key areas for improvement at JBS Plant 2, which will be measured at T2 following the introduction of another "change" (piece of safety equipment). If the findings show that leaders are applying more effective change management principles, such that these identified areas for have improved, it would suggest that Alchemy has been effective.

This report provides a baseline measure of people's reactions to the introduction of helmets at JBS Plant 1. Overall, findings indicate that employees were not satisfied with the management of the change process. In particular, employees felt that there was not enough communication about the introduction of the helmet. Furthermore, many employees expressed frustration at organisational decision regarding helmet accessories. There appeared to be low levels of communication between foremen and their teams about the change. This may suggest that the foremen were not prepared for the implementation. Despite understanding the purpose of the helmets, many were sceptical of the reason for introducing the helmets. Furthermore, many feel that the helmet is not relevant or necessary for the type of work they carry out.

On the other hand, there were also many reports that the change was communicated through a variety of channels. In particular, the night shift felt that they received ample notice. Others indicated that there was insufficient communication through formal meetings and committees, which suggests that the dissemination of information from meetings to workers needs to be improved.

The key findings of this report have implications for JBS in deciding whether Alchemy is an effective training mechanism. This report has highlighted key areas for improvement at JBS Plant 1, which will be measured at T2 following the introduction of another "change" (piece of safety equipment). If the findings show that leaders are applying more effective change management principles, such that these identified areas for have improved, it would suggest that Alchemy has been effective.

8.3.2 Evaluation 2 (Plant 2)

The key findings of this report have implications for JBS in deciding whether Alchemy is an effective training mechanism. This report has highlighted key areas for improvement at JBS Plan 2, which will be measured at T2 following the introduction of another "change" (piece of safety equipment). If the findings show that leaders are applying more effective change management principles, such that these identified areas for have improved, it would suggest that Alchemy has been effective.

This report provides a baseline measure of people's reactions to the introduction of helmets at JBS Plant 2. Overall, findings indicate that employees are not resistant to the change (helmet), however there were a number of issues associated with the management of the change process. In particular, employees expressed negative feelings towards the lack of top-down communication. Similarly, some supervisors indicated that they felt disempowered by the process and would have preferred more involvement. Furthermore, supervisors and employees

expressed frustration at the rushed and disorganised nature of the implementation. Many would have preferred that the organisation wait until all work areas could receive the helmet at the same time and that the suitable helmet accessories were available. These findings suggest that there have been breakdowns in plant-wide communication and implementation.

On the other hand, the findings reveal that most people feel safer as a result of wearing the helmet and most appear to appreciate that the organisation is required to meet certain safety standards. Despite, the varied sources of information reported, an overwhelming majority of people understand that the helmet was introduced to enhance safety. People clearly did not express a strong objection to wearing the helmet. Furthermore, people generally feel comfortable communicating with their foreperson about problems and concerns. Similarly, on most occasions, if applicable, supervisors assisted their team with fitting the helmets. These findings suggest that within team communication appears to flow effectively in most cases. Furthermore, supervisors are invested in supporting their team and the organisation. This is evidenced by their focus group feedback, which indicates that are motivated to support their teams through change, but they need to be empowered to do so.

The key findings of this report have implications for JBS in deciding whether Alchemy is an effective training mechanism. This report has highlighted key areas for improvement, which will be measured at T2 following the introduction of another "change" (piece of safety equipment). If the findings show that leaders are applying more effective change management principles, such that these identified areas for have improved, it would suggest that Alchemy has been effective.

9. Recommendations

Alchemy is recommended as an effective delivery of training. In the current JBS case study on the implementation of helmets across all operational areas, it has demonstrated to be very effective at delivery training. It would therefore be recommended to be used by JBS to roll out other change management initiatives.

The second JBS case study on fall protection in required operations areas has been implemented and in the final stages of evaluation. The following includes a detailed account of the implementation of a major change management initiative (i.e. helmets in all operations areas). The second case while complete, will be included in a latest version of the report.

Appendix A – Analyses Criteria

Surveys

The survey was designed around Kirkpatrick's training evaluation model³. It aims to provide a holistic evaluation of the effectiveness of Alchemy in training leaders within the organisation to manage change at Time 2 (T2; post-implementation). This model is comprised of four levels: reaction, learning, behaviour and results. For T1, responses that demonstrate employees' "reaction" to the change are of most relevance. These questions measure how people reacted to the process, which is particularly important for understanding how well the change process was perceived by employees. The survey comprised of eleven questions, which are detailed below.

- **Question 1:** How long have you worked at this site?
- Question 2: Why do you think helmets were introduced?
- Question 3: How do you feel about wearing your helmet?
- Question 4: Does your helmet make you feel safer at work?
- Question 5: When did you become aware that helmets were being introduced?
- **Question 6:** There was enough communication about the helmet:
 - □ All of the time
 - Most of the time
 - Some of the time
 - None of the time
 - □ Other (please specify)
- **Question 7:** Thinking about the first day that you wore your helmet, complete the following statements with the correct responses:

	None of the time	Some of the time	Most of the time	All of the time
My foreperson explained why I need to wear the helmet				
My foreperson checked to see that the helmet fit me properly				
My foreperson helped me to get used to the helmet				
I felt comfortable talking to my foreperson about any problems I had with the helmet				

Question 8: Did you have problems with your helmet during the first week?

³ Kirkpatrick, D.L. (1994). Evaluating training programs: The four levels. San Francisco: Berret-Koehler; Kirkpatrick, D.L. (1996). Evaluation. In R.L. Craig, 7 L.R. Bittel (Eds.), Training & Development Handbook. American Society for Training and Development, New York: McGraw-Hill Book Co.

Question 10: How do the people in your immediate work area feel about the helmet?

Question 11: Thinking about the people in your immediate work area, please answer the following questions:

	All of the time	Most of the time	Some of the time	None of the time
When you talked to the people in your immediate work area, how often did you talk about problems with the helmet, if any?				
Did you share any of these concerns with your foreperson?				

Focus Groups

Managers at the JBS Plant 2 plant organised for employees to be selected at random to attend focus groups. The sessions were designed to acquire further information about the reported survey findings (see Appendix A for the running sheet; see Appendix B for participants responses). Each focus group discussion was allocated 20 – 30 min in duration to explore the six questions listed below. Managers were invited to attend a separate focus group, which addressed the same questions. The purpose of this was to gain their perspective on the change process.

Question 1.

- a. How did you feel about the introduction of the helmet?
- **b.** What is the difference?
- **c.** Why?

Question 2.

- **a.** Why was the helmet introduced?
- **b.** What is the purpose of the helmet?

Question 3. Survey results showed that most people became aware of the helmets 1 month before they were implemented: Is this the case?

Question 4.

- **a.** 40.4% stated that there was enough communication about the helmets "most of the time": Is this the case?
- b. How was the introduction of the helmets communicated?
- c. How could the communication have been improved?

Question 5.

- **a.** Most people indicated that they didn't have any problems with the helmets: Did you have any concerns?
- **b.** If so, did you express your concerns with your foreperson?
- **c.** If not, why not?

Question 6. If you could say one word or statement about the introduction of the helmets, what would it be?

Appendix B – Focus group running sheet

Purpose: Based of the Helmet Alchemy Survey, gather information about how frontline workers feel about the implementation of a new piece of safety equipment.

Objectives:

- Validate the survey findings with qualitative data
- Understand the underlying assumptions that informed the survey data

Participants: Boning, Kill, Cold Store and Maintenance workers

Question		Purpose	Activity	Time
C.	How did you feel about the introduction of the hard hat? What is the difference? Why?	Validate the survey finding that a majority of respondents have a negative feeling towards the introduction of the helmet.	Illustrate feeling towards the helmet – on the whiteboard – on a scale from "Very bad" to "Great". Demonstrate the difference between focus group and survey responses.	5mins
	Why was the hard hat introduced? What is the purpose the helmet?	Understand the underlying assumptions and perceived discrepancy between the intentions and purpose of introducing the helmets.	Drill down on Supervisor communication of reason/53% feel it does not make them feel safer	5mins
Q3. a. b.	Survey result showed that most only people became aware on the day: Is that the case? Why do you think that is?	Validate and understand survey findings.	Open questioning	5mins
Q4. a. b.	36.6 % stated not enough communication none of the time: Why do you think this happened? What would you have preferred?	Validate survey findings and understand where the paucity of communication stems from.	Open questioning	5mins
Q5. a. b. c.	The survey showed that most people said "not applicable" to having had problems with the helmet, but then responded with "some of the time" to the next question: Did you have any concerns? If so, did you express your concerns? If not, why not?	Determine whether the confusion was in relation to understanding the question or whether they were responding hypothetically.	Open questioning	5mins
statem	could say one word or ent about the introduction of mets, what would it be?	Gauge the general "feeling" and "thinking" around the change process.	Open questioning	5mins