Final Report - Public

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ALC CISP Stage 1 Review

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Executive Summary

This project involves an evaluation of the effect of a three-year partnership between ALC and MLA in the Stage 1 Collaborative Innovation Strategies Program (CISP), and offers recommendations for the Stage 2 Co-innovation Program. The Stage 1 CISP has spurred the creation of foundational innovation initiatives throughout ALC's business operations, uncovered significant opportunities, and realised a percentage of these opportunities. The Stage 2 Co-Innovation Program, agreed to in June of 2017 and informed by the joint ALC-MLA Executive Steering Committee, will build upon that progress with an improved relationship management system and innovation resource structure.

The success of the ALC's Stage 1 CISP was measured by calculating the efficacy of the ALC Innovation Manager (IM), dedicated innovation-focused work groups, and the company's general framework for innovation. This informational analysis examined the value of both tangible (i.e. financial) and non-tangible (i.e. ideation, connectedness, etc.) benefits of the innovation program. Additionally, a series of interviews were performed with related ALC and MLA staff to identify new value creation and to hear voices from several different perspectives within the program to create a more detailed and accurate picture of its positive impact.

Sixty-three different projects were considered as part of ALC's Stage 1 CISP. In summary:

- 54% of projects focussed on **Operational Efficiency** (Figure 1), which represented 31% of total project funding (Figure 2).
- **Sustainability** projects received the largest amount of funding (63%, Figure 2), which included the $2.48 million installation of a solar energy system (undertaken by ALC without MLA cash support).
- 25% of projects have been completed with a calculated gross benefit of **$13.1 million**. 99% of this benefit was split across increased product value, yield and efficiency, with labour savings accounting for 1%. Of the current projects that have not been completed there is an estimated $4.89 million of gross benefit.
- 94% of projects were **Continuous Improvement** or **Incremental Innovation**. Note this focus was driven by significant plant expansions required to accommodate a new service contract for Coles.
- **ALC self-financed the bulk of projects** within the Stage 1 CISP, including rotary hide puller and Carnetec stunner improvements, production robots, and innovative electrical immobilisation which have the potential to benefit production processes in the Australian industry outside of ALC.
- The information on some individual project benefits was incomplete, which made accurate assessment of efficacy difficult so a conservative approach was taken.

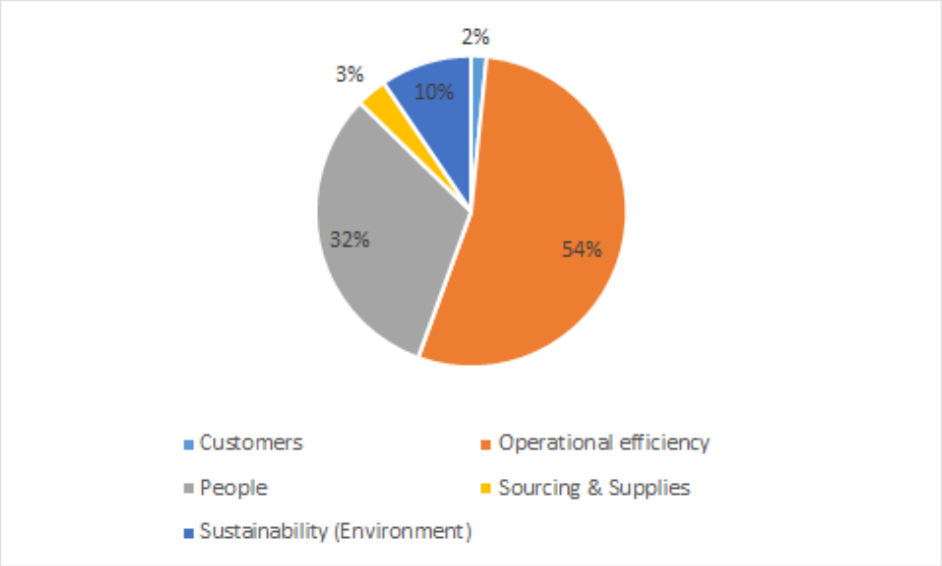

Figure 1: The focus of projects in Stage 1 CISP

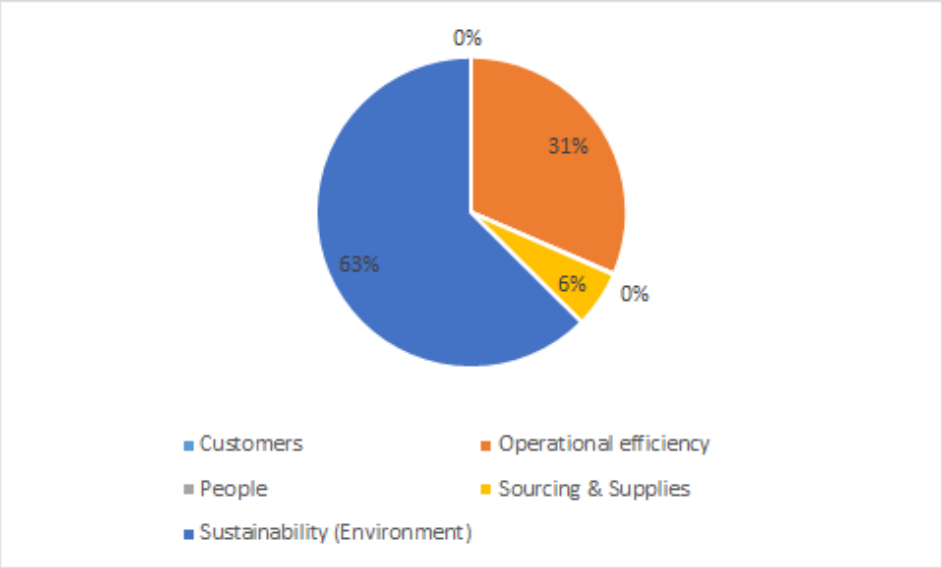

Figure 2: % Expenditure by project focus in Stage 1 CISP

The **operational focus** led to several notable successes throughout Stage 1. These included **design** and **installation** of a few **new systems** and **facilities** which have resulted in gains in yield and efficiency, and labour savings (not including ALC's significant processing and boning capital expansion):

- boning room
- slaughter floor
- offal cold-store
- evisceration robot
- brisket cutting robot
- fat sucker robot.

The corporate culture of ALC transitioned to become more supportive of innovative exploration over the course of Stage 1 of the CISP. This was evidenced by:

- Innovation and collaboration had greater emphasis at both a board and operational level.
- Creation of an innovation team whose sole purpose is to create innovation opportunities, led to employees and management becoming more invested in the company's overall success and in turn has led to higher performance.
- A more engaged team that is more open to adopting new approaches. Employees are more engaged in problem-solving processes, and contribute more to solutions that foster increased future innovation.

Recommendations for Stage 2 Co-innovation program

ALC's Stage 1 CISP has provided the foundation and platform to identify opportunities that could be realised in a Stage 2 Co-innovation program. Figure 3 indicates distribution of all projects across innovation areas and the subset of projects to be completed. Specific recommendations for the Stage 2 program include:

- Program focus to be on horizon 2 and horizon 3 projects (greater percentage of Radical Innovation projects and reduce the focus on Continuous Improvement).
- Better collaboration between ALC and MLA. A number of projects were not funded in areas where new value could be created. This requires an improved focus on identifying and quantifying the value opportunities by ALC. But it also requires closer collaboration and engagement from MLA to help identify opportunities from outside ALC's circles, and from outside the industry in terms of new supply chain models and approaches.
- Improve the measurement and utilisation of metrics to support strategic innovation project focus and program performance.
- Create an improved innovation structure, emphasising repeatability, internal and external collaboration and stronger connections between overall ALC business plan and innovation strategies.

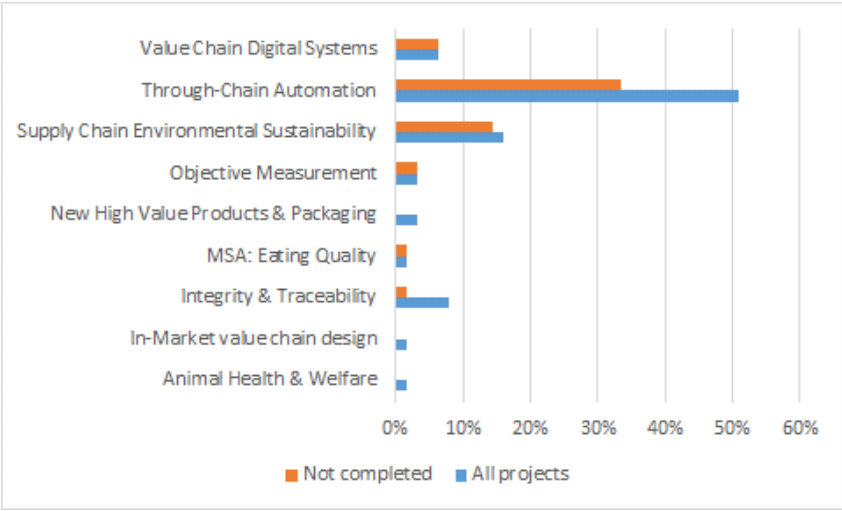

Figure 3: CISp Stage one projects mapped to new Co-Innovation Program Modules

Glossary

CISP	Collaborative Innovation Strategies Program
IDP	Innovation Development Program
IM	Innovation Manager
ROI	Return on Investment
Continuous Improvement	Continuous improvement is an ongoing effort to improve products, services or processes. These efforts can seek “incremental” improvement over time or “breakthrough” improvement all at once
Incremental Innovation	Incremental innovation is not about huge sweeping changes. On the contrary, firms that innovate incrementally tend to do so just a little bit at a time. Think of incremental innovation as cost cutting or feature improvements in existing products or services (Leifer, 2000). In short, incremental innovation generally focuses on making modest improvements to existing processes, products or services
Radical Innovation	Radical innovation involves creating a completely new process or product in response to a market need or opportunity. Radical innovations tend to come about because of careful research and development into a specific issue or problem, and frequently make use of new technology to solve them. These kinds of innovations are often seen as 'breakthrough' innovations, some of which can change the entire way an organisation operates and, on occasion, can result in a new product or service that impacts an entire market sector

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1 Introduction

A third party independent study was initiated to evaluate the quantitative and qualitative impacts of ALC's Stage 1 Collaborative Innovation Strategies Program (CISP). This report details the findings of this study.

1.1 Background

The purpose of this project is to evaluate the impact of ALC's Stage 1 CISP as well as provide recommendations for development of a proposed Stage 2 Co-innovation Program.

ALC have engaged with MLA in a CISP over the past 3 years. One of the key outcomes of the program has been to develop and manage initiatives to build innovation capability within ALC's business operations. In June 2017, MLA and ALC agreed to progress to Stage 2 of the Collaborative Innovation Program. The design of this program has been considered within this report considering the proposed activity areas within MLA's new Co-Innovation Program.

The new Co-Innovation Program will align with ALC's business growth strategy. To establish strategic direction for the program, a joint ALC-MLA executive Steering Committee will be formed to match innovation activities with business and industry priorities.

A revised relationship management and innovation resource structure (i.e. different from Stage 1) for both ALC and MLA will be required to be developed to manage the expanded program, and the role of the joint ALC/MLA Executive Steering Committee in providing strategic direction will be further defined.

1.2 Objectives

This project is an independent evaluation to help measure the outputs, outcomes and impacts of the Stage 1 program, and build the case for investment in the new Co-Innovation Program.

Findings support the assessment of the success of the ALC's Stage 1 CISP by quantifying the effectiveness of the ALC Innovation Manager (IM), dedicated work groups in the specified innovation focus areas and the company as a whole in developing a platform for innovation across the company.

The findings and recommendations of this project will be presented to the ALC/MLA Executive Committee.

The specific objectives of this project were to:

1. Identify the extent to which ALC has added value to the Australian value chain through the CISP program from paddock (producer) to plate (the consumer);
2. Provide insights around opportunity areas that could be further developed by ALC under the new Co-Innovation Program;
3. Identify areas or weaknesses in the Stage 1 program resulting in missed opportunity including recommendations on how to engage differently in the future for increased benefit to ALC and industry.

1.3 Methodology

Evidence was gathered of the impact various activities initiated by the IM and specified innovation champions have had across the company including but not limited to the areas of operational performance, financial impact and skills and capability development to foster a culture of innovation.

An analysis of benefits achieved was consequently conducted based on this information. This addressed direct financial value benefits as well as considering the non-tangible benefits in areas such as ideation, connectedness both internally and externally, alignment to strategic vision and other areas which both promote and deliver innovation.

A sequence of one-on-one interviews were undertaken with key ALC Managers and MLA staff directly related to the program. This approach allowed us to identify how the program created new value aswell as unearth a broad range of views both within and external to the company to uncover other less obvious insights around how the program has created new value.

Further, a desktop study of ALC's CISP project reports, presentations and milestones allowed the quantitative and qualitative intracasies from past and present ALC projects to be review to identify benefits and impacts achieved during CISP Stage 1.

2 Brief appraisal of ALC's current approach in the light of best practice innovation

To remain competitive, ALC should find ways of increasing their rate of innovation. This requires investment in people capability and processes that together will support repeatable cycles of innovation above the natural baseline. ALC has identified areas for innovation process improvement.

Figure 4 summarises the fact that many company processes and support capabilities are required to take an idea from concept to creation of new value. How staff exploit knowledge external to the company to generate ideas and then convert them to inventions is only half the process and is irrelevant unless those inventions can be converted into realised value. Most companies don't have repeatable processes to do this.

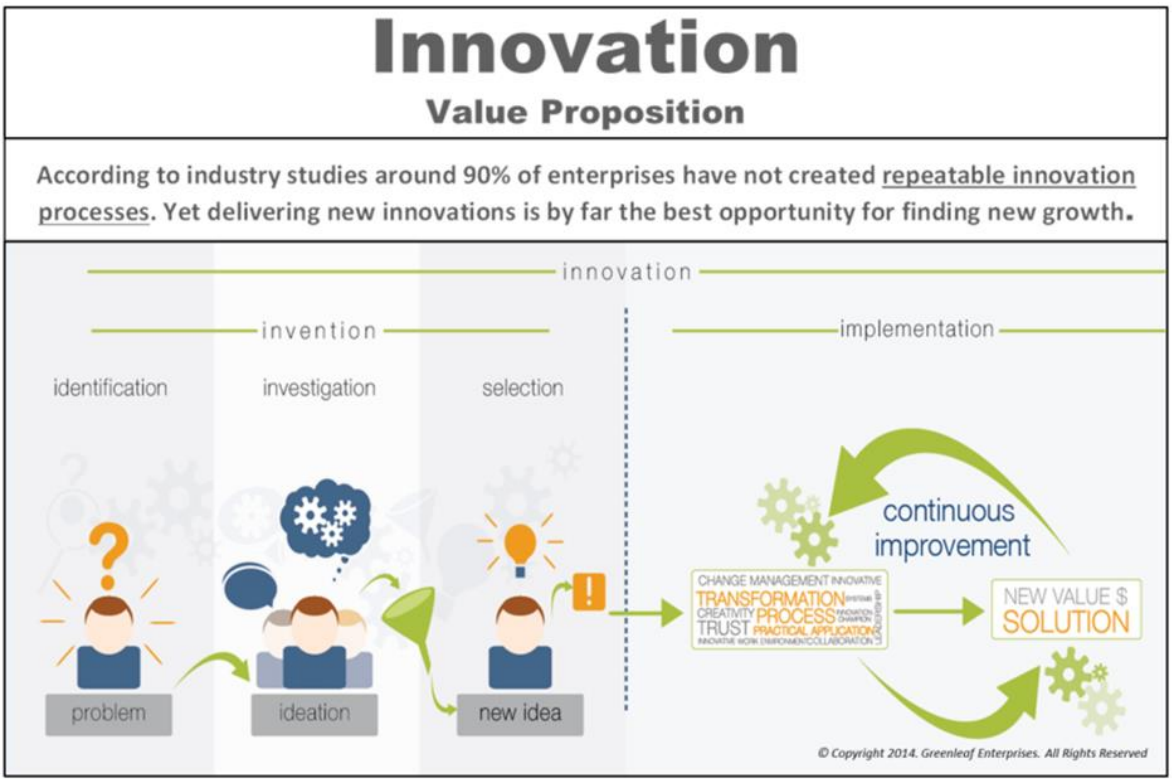


Figure 4: The Innovation Value Proposition

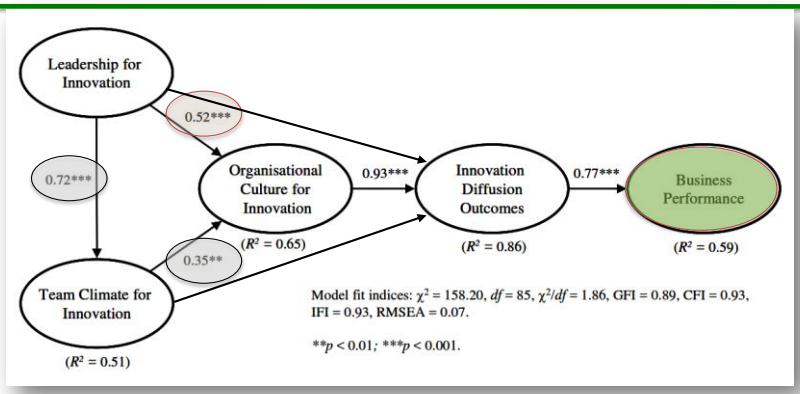
2.1 Innovation Drivers: Capability Development, Leadership, Diffusion of Innovation

In considering the people capabilities that ALC have focused on building, it is recommended that skills for innovation and creative thinking be included in the mix. Research across a range of companies found that capability for development of innovation processes was 30% more effective in improving company performance than building management capability (Figure 6). Strong leadership for innovation with intentional activities to mould a single culture is also very important. Research summarised in Figure 5 found that diffusion of innovation accounted for 50% of the improvements in business performance and that leadership for innovation capability was more significant than team environment although both had a strong positive influence.

ALC has identified that improvement in processes for prioritising, measuring, and monitoring innovation activities will improve execution and evaluation will reduce missed opportunities and value benefits that resulted under the current program structure.

Impact of Innovation Leadership on business performance?

Greenleaf
Insight Innovation Growth



Panuwatwanich, K., Stewart, R and Mohamed, S., Empirical Study on the Relationship between Climate for Innovation and Business Performance Outcomes in Design Firms. Griffith School of Engineering, Griffith University

1. Leadership impact on innovation is more than 2 times greater than "Team Climate for Innovation".

2. Diffusion of innovation accounts for more than 50% of the variation that contributes to Business Performance – this is significant

Figure 5: Innovation leadership impacts on company performance

Innovation Leadership Research

Greenleaf
Insight Innovation Growth

What is the relative impact of Leadership factors, Managerial skills, and Management Innovation on business performance?

- Leadership for innovation is more than 30% more effective in improving company performance than leadership for management
- Managerial Leadership – business processes, transactional leadership
- Innovation Leadership – Creative thinking, new value, transformational

Table 3: Hypothesis testing result of hypothetical research

Hypothesis	Coef	t-stat
H1: Leadership influences managerial skill	0.860	51.610**
H2: Leadership influences organizational innovation	0.755	16.536**
H3: Managerial skill directly and positively influences organization performance	0.240	2.185*
H4: Organizational innovation positively influences organization performance	0.435	4.090**

**p = 0.01, *p = 0.05, Coefficient refers to the Beta (β), t-stat is the t-value

0.206

0.328

Phoosawad, S., Fongsuwan, W., Trimetsoontorn, J,. 2014. Leadership, Management Skill and Organization Innovation Affecting Auto Parts Organization Performance. Res. J. Business Manage., 8 (2): 70-88

Figure 6: Leadership for innovation outperforms management leadership

2.2 ALC Innovation Strategy

ALC's current innovation strategy (Figure 7) set the expectations for their Stage 1 CISP. The current innovation strategy covers five core business components including People Management, Sustainability, Operational Efficiency, Customers and Sourcing and Suppliers (Figure 7).

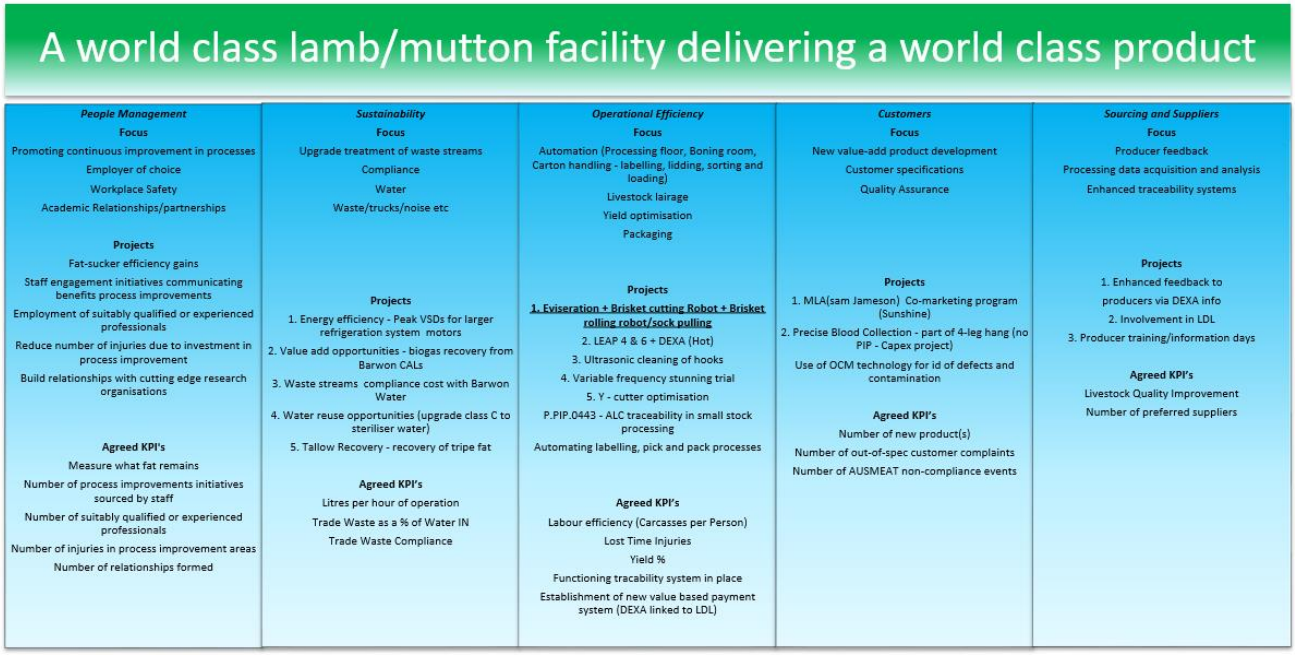


Figure 7: ALC's Innovation Strategy

ALC's Stage 1 CISP lacked a degree of clarity and focus. This resulted from a disconnect between the innovation strategy and corporate strategy. Given the company was newly integrating the diversity of Colac and ALC's previous cultures, that is understandable. There was also an expectation on ALC's part that more strategic support would be provided by MLA within the program.
A stable cultural foundation has now been established. Going forward, ALC will need to develop an enterprise level innovation strategy that supports the broader businesses' strategic business objectives over the next 5 years.

Strategic innovation is about systematically raising the amount of innovation that an organisation produces. Innovative companies don't just develop one innovative idea but develop a creative culture that continues to innovate time and time again. "Innovation becomes strategic when it is an intentional repeatable process (Palmer and Kaplan, 2007)". It is recommended that ALC:

- Evaluate the preliminary key strategic focus areas (operational efficiency, customers and suppliers, sustainability, customers and people) and the associated investment within each
- Determine the organisational capability gaps considering the innovation objectives
- Review innovation management systems within the organisation and provide recommendations against best practice
- Within the strategy address best practice risk management recommendations regarding the innovation program.

3 ALC CISP Stage 1 Review

3.1 Investment in Innovation

Sixty-three projects were considered as ALC's Stage 1 CISP. Most of both project focus and expenditure was on Operational efficiency or Sustainability (Figure 8 and Figure 9). The focus on operational excellence and sustainability (reducing energy and waste costs) is the number one factor in maintaining profitability within the existing business model due to high raw material cost and low profit margins. Most projects were self-financed with $5 million of ALC funds being used with $520,000 of MLA co-funding.

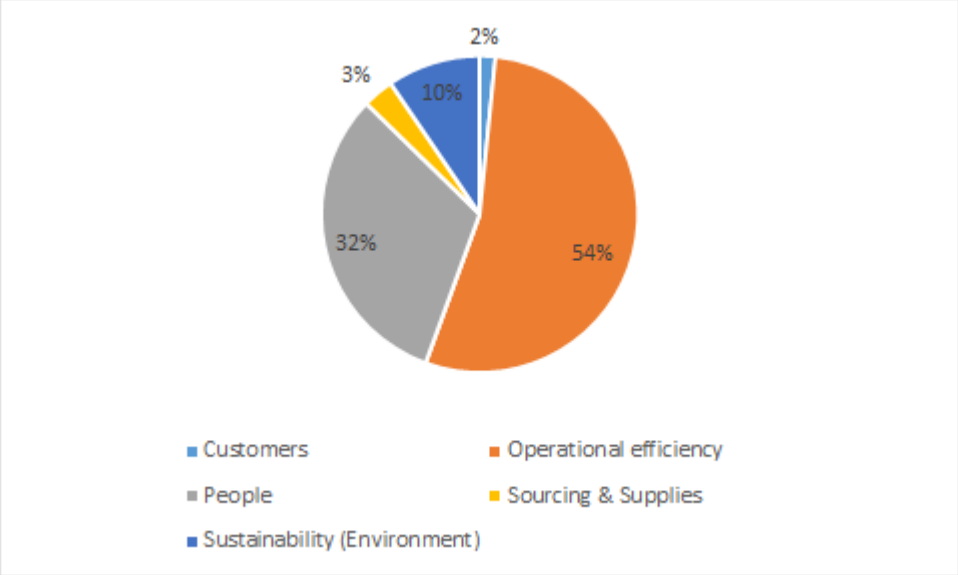


Figure 8: The focus of projects in Stage 1 CISP

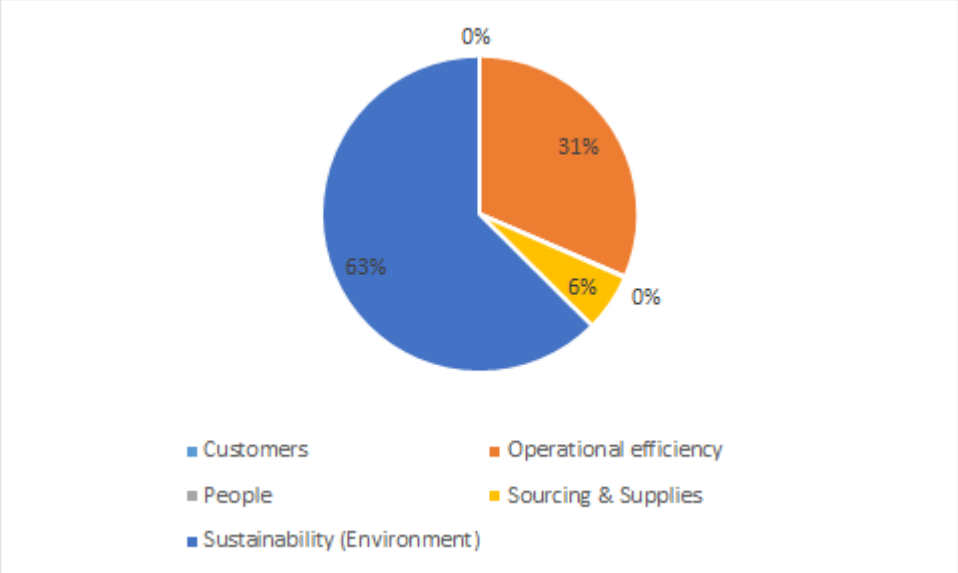


Figure 9: % Expenditure by project focus in Stage 1 CISP

25% of projects (16 of 63) have been completed with an estimated $13.1 million/annum of gross benefit. 99% of this benefit was split across increased product value, yield and efficiency, with labour savings accounting for 1%. Figure 3 indicates distribution of all projects across innovation areas and the subset of projects that have not been completed estimated at $4.89 million/annum of additional gross benefit. Examples of operational achievements through these projects include:

- Design, planning, installation, commissioning and production stabilization of a new boning room
- Offal Cold store design, install & commissioning
- Evisceration Robot, install & commissioning
- Brisket cutting robot, install & commissioning
- Fat sucker robot, design & testing
- LEAP 4 + DEXA (Hot)
- Ultrasonic cleaning of hooks
- Variable frequency stunning trial
- Y - cutter optimisation
- P.PIP.0443 - ALC traceability in small stock processing
- Automating labelling, pick and pack processes.

A selection of specific benefits from the projects include:

- Improved retention and recruitment of staff through training and development programs and relationship with external parties
- Improved OH&S with lowered injury claims by improving tasks (mitigating potential cost of >$1 million)
- Labour and yield savings with use of robotics (various)
- $0.12/head gain through combination of increased blood volume collection and selling to new market
- 1.2% increase in carcase yield because of spray chilling installation
- 17% increase in efficiency in freezing of offal
- Secured 10-year contract with Coles
- 20% increase in throughput through new boning room.

The focus of projects has been continuous improvement or incremental innovation (Figure 11 and Figure 12). CISP Stage 1 has laid the foundations for ALC to have the opportunity of being a highly innovative organisation through a Stage 2 Co-innovation Program.

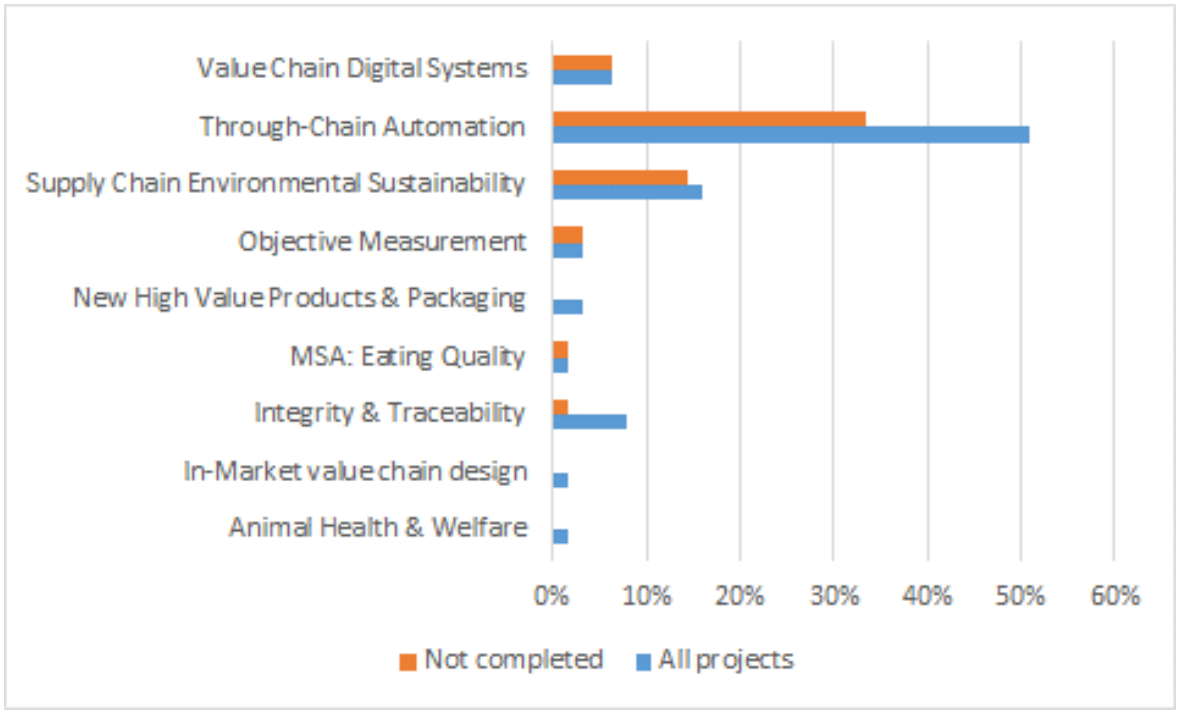


Figure 10: CISp Stage one projects mapped to new Co-Innovation Program Modules

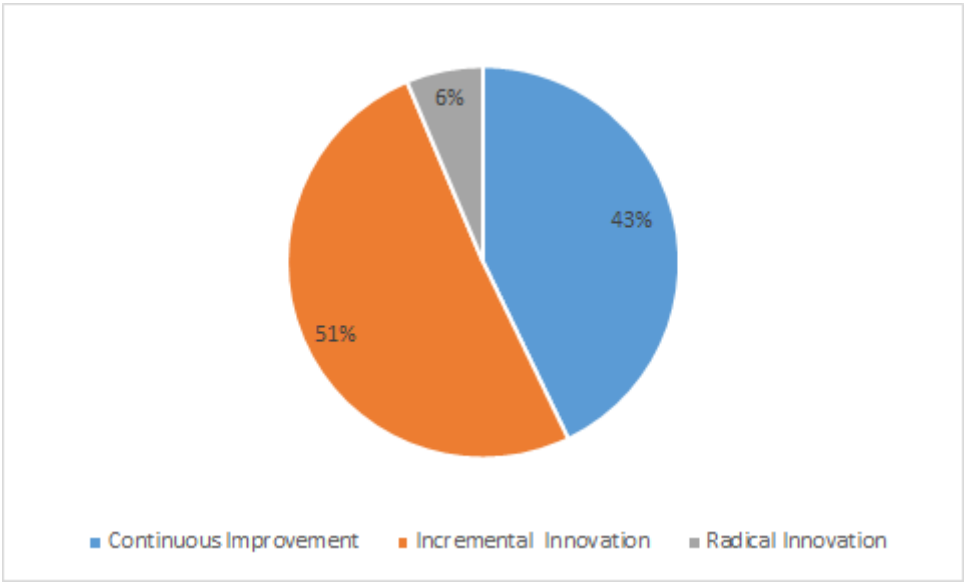


Figure 11: % of projects by innovation type for Stage 1 CISP

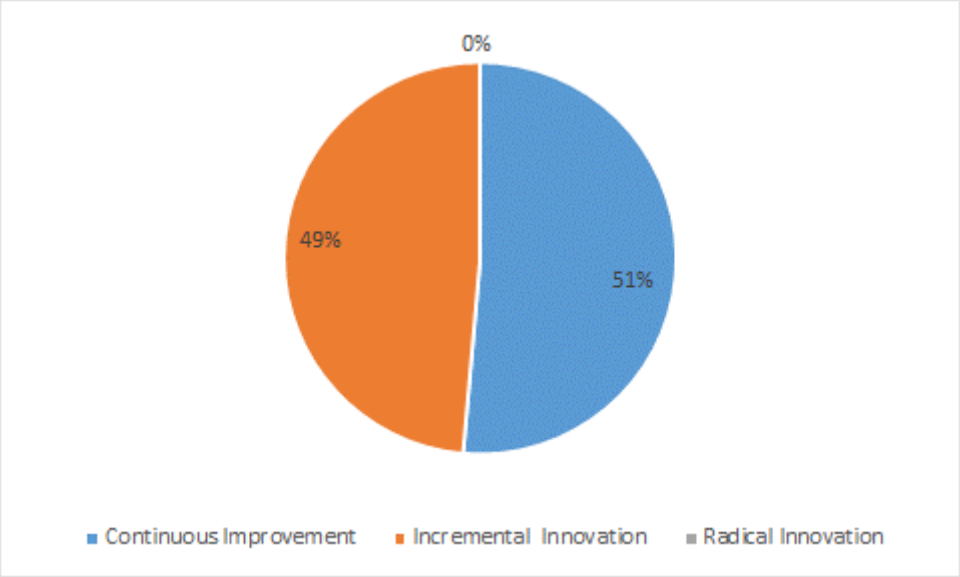


Figure 12: % funding by innovation type for Stage 1 CISP

4 CISP Stage 1 Summary Finding

The purpose of this report was to assess the impact of ALC's Stage 1 CISP. In broad terms, ALC's Stage 1 CISP was a resounding success that resulted in broad changes in innovation culture and financial success. While there were several areas identified for improvement those can be better addressed during the design of ALC's CISP Stage 2. The key outcomes and findings uncovered during the study as detailed below.

Separation between innovation and corporate strategy

The Stage 1 CISP resulted in the development and management of initiatives meant to build innovation capability within ALC's business operations. This innovation strategy included five core business components: People Management, Sustainability, Operational Efficiency, Customers, and Sourcing and Suppliers (Figure 7). However, ALC suffered from a separation between their innovation and corporate strategy, causing a loss of focus of how to make innovation strategic within the Stage 1 CISP.

Operational excellence focus

ALC's Stage 1 CISP focused on operational excellence and sustainability (reducing energy and waste costs). Benefits from these projects included:

- Improved retention and recruitment of staff through training and development programs and relationship with external parties
- Improved OH&S with lowered injury claims by improving tasks (mitigating potential cost of >$1 million)
- Labour and yield savings with use of robotics (various)

- $0.12/head gain through combination of increased blood volume collection and selling to new market
- 1.2% increase in carcase yield because of spray chilling installation
- 17% increase in efficiency in freezing of offal
- Secured 10-year contract with Coles
- 20% increase in throughput through new boning room.

Strong foundation established for Stage 2 Co-Innovation Program

A strong foundation has been established in Stage 1 CISP for the next Stage of innovation for ALC. The groundwork has been laid and there is substantial opportunity for more strategic innovation by transitioning, from the current position, to increased behavioural changes and speed, and focus on greater Radical Innovation.

Opportunity to leverage MLA co-funding for ALC and wider industry benefit

ALC self-funded most of the projects in Stage 1 CISP. However, there are potentially significant wider industry benefits from this investment including improvements to rotary hide puller, state-of-the-art production robots, and the introduction of electrical immobilisation. ALC's Stage 2 Co-innovation Program is an opportunity to greatly increase the leverage of MLA co-funding to both benefit ALC and the wider industry.

Positive culture change

Over the last three years, ALC has undergone a significant change in their corporate culture, especially regarding how they treat collaboration and innovation from within. ALC formed their first Innovation Team, whose primary goal is to promote innovation across all levels of the business. As a result, many employees have gained a renewed sense of ownership over the business' success, which has in turn led to more collaboration, engagement, and adoption. Their willingness to help problem-solve, and identify new ideas has increased the employees' influence over the company, and has driven their increased innovation success.

Improved measurement and new metrics required

An incomplete set of cost and benefit data for Stage 1 CISP projects has meant that the full financial value could not be captured in this review. Thus, it is imperative that ALC implement improved data collection and recording as part of their innovation process. Furthermore, a range of other metrics should be tested and the most suitable employed in future programs.

5 Recommended progression to a Co-Innovation Program

Stage 1 of the CISP builds a strong foundation platform on which innovation initiatives can be built. Transitioning into a new Co-Innovation Program represents significant opportunity to capitalise on areas of improvement uncovered during that first Stage but not yet actioned.

To create the competitive advantage ALC needs to compete globally, we recommend continuing with Stage 2 with some customisation. One of the priorities is to build a collaborative network of

innovation champions and enablers. Spreading capacity to others across all levels of the business will foster more disruptive innovation and increased value.

In broad terms, ALC must improve their structure to reap the benefits of their innovation. They must create a stronger link between their business and innovation strategies. Ultimately, ALC should develop an enterprise-level innovation strategy that cascades through all levels of the business.

To foster a creative culture and systematised innovation, we recommend that ALC:

- Evaluate preliminary key strategic focus areas, and the associated investment within each
- Determine the organisational capability gaps considering the innovation objectives
- Review innovation management systems within the organisation and provide recommendations against best practice.
- Within the strategy, address best practice risk management recommendations regarding the innovation program.

Although much of this accountability lies with ALC, more engagement and support is required from MLA in a Co-Innovation Program than ALC have received in CISp stage 1. This support is in developing viable and jointly fundable innovation projects, as well as insights and learnings from MLA on wider industry insights as well as insights from other industries on possible ways of increasing supply chain value.

Given there was only a 10% funding contribution from MLA, relative to ALC's spend in stage 1 (this excludes any investment ALC made in core infrastructure), there is scope for more significantly larger collaborative projects.

5.1 Structure of the new Co-innovation Program

The word "Co-innovation" paints a picture of jointly working, collaborating, assisting, helping each other. Two or three or more parties working together to find new value.

ALC internal focus for increased collaboration has been recognised as an opportunity to improve on the activities in the first program. This includes becoming more focused within their team on prioritising specific areas of improvement back to the overarching plan, actions required, measuring and reporting those actions, and refining as required.

An internal Innovation committee will be established. This will include revolving members dependant on the projects, discipline areas and business foci at the time. The committee will include members of the board, management and senior operations.

Building innovation capability within this team will be a key activity within the new Co-Innovation Program required to support the program outcomes.

External supply chain collaboration activities will increase. There is an opportunity to form an innovation committee with Coles under their new 10-year contract that integrates with ALC's internal innovation committee. This has already been discussed with Coles and will consider

innovation in the areas of procurement, processing, new product and packaging development and supply chain design.

MLA / ALC collaboration is something ALC is looking to see increase in stage 2. The structures proposed and planned areas of development should provide a rich context by which to collaborate.

5.2 Diversified focus areas

To fast-track their innovation and growth strategies, ALC is looking to creating a more balanced innovation portfolio by diversifying their efforts and transitioning focus to horizon 2 and horizon 3 projects (Figure 13). A preliminary plan has been developed but will require refinement by the innovation committee that is yet to be formed up. The proposed plan is well balanced across supply chain, technology and business models and aligns well with the core areas outlined in MLA's Co-Innovation focus areas.

5.3 Fast tracking from a new base

Changes in ALC's business since the start of CISp 1 have created new opportunities for innovation in this new co-innovation program with MLA including:

- The Coles 10-year contract has enabled investment in core infrastructure, increased producer supply chain contacts and opportunity for new consumer focused products as off-shoots to the core retail volume that can underpin new innovations.
- Stage 1 CISp helped build initial capability within the company and scoped a base of opportunities that are yet to be capitalised on.

Transitioning the Colac and Sunshine cultural differences in the early days to a family company has now stabilised the business. This includes a new approach to people at an operational management level and has stabilised key roles in the workforce that had previously been very transitional. In conjunction, the stage 1 CISp innovation team development created a more collaborative culture of participation in problem solving at an operational level. This can be built on more easily and quickly over the next 3 years.

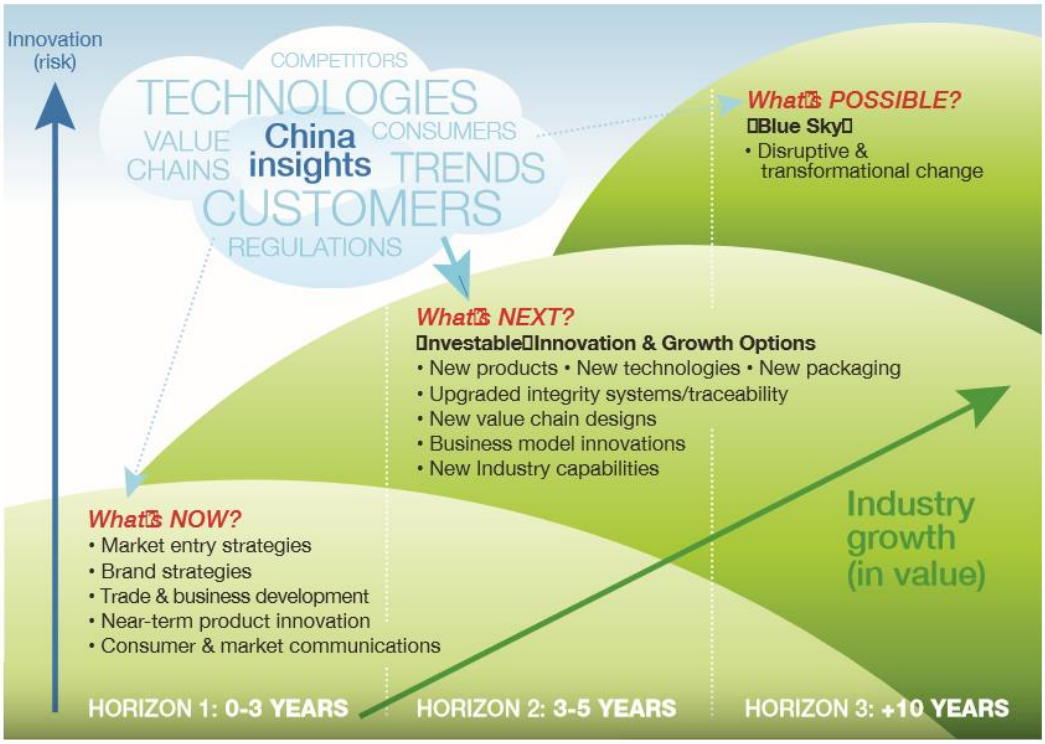


Figure 13: Collaborative Co-Innovation Program

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