Final report

ACC's Collaborative Innovation Strategies and Co-Innovation Manager

Abstract

Australian Country Choice (ACC) and MLA Donor Company (MDC) have agreed to progress a Collaborative Innovation Program over a three-year period commencing in March 2019. The program is designed to support the development and implementation of ACC's red meat high value growth strategies in both the domestic and global markets to be achieved via a range of innovative products, packaging, processes and new business model concepts. The specific focus of the program will be on insights and design led innovation approaches to New Product Development (NPD) and Process Improvement - in particular, to drive High Value beef exports. It is noted that in addition to the development of new high value products to meet customer demand, the program may also extend more broadly into the ACC's business activities where opportunities to innovate red meat markets are identified.

The Collaborative Value-adding Co-Innovation Program will be overseen by a joint ACC / MLA Steering Group and implementation will be managed by a team comprised of ACC, MLA and external resources as required. This project provides support for a full-time (i.e. 1 FTE) ACC Innovation Manager for an initial period of three years with an option to extend to a second three-year term based on overall progress of the program and projects. As the program strategy evolves it is anticipated that specific R&D projects will be developed, and additional resources to support these projects will be considered as required. Each individual R&D project will be contracted via a separate schedule to be attached to the Collaborative Head Agreement.

The project has been successfully achieved by completion of:
•   Development of new innovative products packaging and processes;
•   Skills development (including study tours where applicable);
•   Participation in insights to innovation networks; and
•   Independent co-inovation program evaluation conducted by Hargraves (Section 7.10)
•   Publication of key innovations (including connectivty (Section 7.11)
•   Co-innovation and digital officers attended the mid-February co-innovation networking meetings
•   Participated in internal and external networks to accelerate outcomes (including the Co-Innovation & Digital / Supply Chain managers networking event (March 2019 & May 2020).
•   Actioned steering committee tasks

A primary focus of the Co-innovation manager role has been higher level oversight of development and implementation of Power BI across ACC operations to provide information and make real time business decisions more accessible. In addition, ACC has a proposed broader vision of developing internal end to end supply chain capability (i.e. data lab). Critical to developing Australian Country Choice's capability is to implement a marketing strategy using data and insights. In addition, a Digital factory role has been created to create an entire end to end data capability to mine, capture, analyse and derive commercial decisions right across the business. These roles will also involve analysing data sets to identify more profitable business outcomes.

An evaluation of the ACC Co-innovation was conducted by Hargraves Institute (Tess Julian) in August 2019. A review of the program, including the ACC Co-Innovation and the Digital on-farm program is currently underway. The outcome will be a report including potential case studies. An independent evaluation of the ACC Co-innovation program was conducted with a summary captured in a Partner Snapshot (Refer to Appendix 7.10).

ACC's Co-innovation manager providing oversight of the co-funded digital officer roles (P.PSH.1159; P.PSH.1223 & P.PSH.1215). The key focus has been the development and implementation of Power BI on all ACC and ACBH properties. Power BI is now operating to automatically collect and collate crush-side data on every property. The Cattle Management system continues to be a primary focus of future work using Hitachi's Process Intelligence solution. ProTrace has been the platform that underpins the ACC Cattle Management System with overlay by Hitachi Process Intelligence system as the process management platform. The Power BI has been operating for several weeks with senior management support, including IT General Manager's endorsement as a fully operational data capture & collation system.

ACC is currently reviewing and evaluating options to integrate their data capture and analytical capabilities aligned with their data transfer needs. ACC is in the process of linking all their disparate systems together to enable them to have improved real time reporting systems to make better informed business management decisions. In addition, ACC's business as a dedicated supplier to a single client is transitioning with an opportunity for ACC to develop business with new customers. To enable ACC to tailor their business they are setting up a data lab that will include a data analytics and insights team covering agribusiness, processing and marketing. This will enable ACC to make sure their beef products are providing what their customers' needs are as well as making sure their animals are meeting marketing specifications.

The current project has significantly contributed to generating timely and useable information from the abundance of data that ACC collects. As a high level, some of the reports that they have been able to generate include:

- Property reporting on yard sessions including inductions, branding and pregnancy testing. This information shows information like head numbers, weights, pregnancy status, from paddock and to paddock etc.
- Property reporting following cattle through feedlots and processing. This provides the property staff information on the performance of their cattle after leaving the feedlot, including feedlot weight gains, feedlot health information, carcass grading performance etc. Within this report we not only report the ACC/ACBH property that these cattle came from but also the vendor from who we originally purchased the cattle (internal and external vendors).
- Feedlot reporting showing rolling stock on hand at each feedlot by pen and by cattle class. This reporting also allows closer understanding of cattle within a pen, including vendors, induction weight, days on feed, morbidity and mortality etc.
- Feedlot performance reports showing on feed performance measures and carcass performance once slaughtered.
- Feedlot gross margin reports showing close out information by lot killed which considers the purchase price, feedlot costs and sale cost of the cattle.
- Processing reports on yields and yield variances in offal rooms by customer by day;
- Offal condemn report showing quantity and reasons for offal condemns by customer by day. This report shows information by offal item and we can also see the condemns by vendor;
- Processing reports on yields and yields variance in boning room by customer by day;
- Reconciliation reports for kill to bone and for stock on hand;
- External sales information showing sales volumes and values by customer, product SKU, destination etc.

Dashboards are currently being used by the business daily to make decisions. By all reports, all managers and GMs across properties, feedlots and processing have been impressed with the information available and the requests for additional reports and information are growing.

An evaluation of the ACC Co-innovation was conducted by Hargraves Institute (Tess Julian) in August 2019. A review of the program, including the ACC Co-Innovation and the Digital on-farm program is currently underway. The outcome will be a report including potential case studies.   Draft results from the third party independent evaluation of the ACC Co-Innovation program. Ongoing input required from ACC and MLA.

A series of strategy meetings between ACC & MLA were conducted during the Milestone 10 reporting period, including (Refer to supporting documents in Appendix):
i)   Digital & data strategy review
- Reviewed the outcomes and achievements over the past 12 months of the digital and data capability was conducted by the steering committee group on 14 May 2021.
- This formed part of the Go/No go stage gate requirement for Milestone 8 for the current project as well as individual digital role projects. The project steering group approved to progress to the next phase, subject to ACC & MLA approval.
ii)   On-farm/feedlot R&D Bi-annual summit was conducted with the ACC Ag team on 14 May 2021.
iii)   Off-farm R&D Bi-annual summit was conducted with ACC, MLA and AMPC tech team on 28 May 2021.
iv)   A series of project review meetings

Co-innovation focus areas aligned with ACC business priorities have been identified and will be a key focus for the next phase (i.e. Milestone 10 & beyond):
- Sustainability supply chain strategy and a new co-innovation role.
- A review of current ACC data lab contracts, including the development of revised schedules and MLA-ACC collaborative contracts for all three digital officers across the entire ACC supply chain (i.e. current projects - P.PSH.1159; P.PSH 1215 & P.PSH.1223).
- Key business improvement focus areas have been identified through the R&D On- and off-farm bi-annual Summits. An associated list of new R&D priorities and projects are ben refine to focus on over the next 12 months.

There was a planning meeting conducted with ACC data lab team and MLA on "Capturing carcase value" on 13th July. Refer to Section 7.19 for notes and actions. The next phase will continue to focus on building PowerBI reports to provide ACC's Operations managers with information and data to make real-time business decisions. In addition, the next quarter will also focus on expanding from the outcomes of the "Capturing carcase value" meeting.

There was a subsequent follow up discussion (20 July) between MLA and ACC data lab team. ACC has already conducted a significant amount of analysis in this space but agreed to discuss with MLA. ACC indicated that they have looked at building a predictive equation / model based on existing data.

The agreed next steps were:

1. Organise an introduction between MSA and ACC data lab team
2. MSA to attend a 'discovery' meeting with ACC to discuss MLA data analysis and proposed approach vs what ACC have already built / analysed.

3. MLA/ ACC write up project hypothesis – one pager i.e. "To test if the correlation between existing animal data provides a strong predictor of actual animal performance (yield / quality) in the ACC supply chain."
4. Finalise project team and next steps including builds – i.e. feedback, model enhancement etc.

A review of current ACC data lab contracts is underway, including the development of revised schedules and MLA-ACC collaborative contracts for all three digital officers across the entire ACC supply chain (i.e. current projects - P.PSH.1159; P.PSH 1215 & P.PSH.1223). The realignment of roles was proposed.

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1   Project Milestone Description

2   Milestone 12 – FINAL REPORT

A final Commercial in confidence report has been submitted to MLA for review and approval, it included recommendations for future stages with a third party review of key findings including impacts and outcomes from the program. This report included summary of project outcomes derived from the co-innovation program, feedback on alignment of ACC business and innovation strategy over the past 3 years and capability development of insights2innovation.

A public final report that will be approved by MLA & ACC for industry release. Lessons learnt on innovation approaches used to identify high valued growth opportunities and successes, failures, surprises to be presented.

ACC to deliver one industry workshop and update to ACC & MLA senior management.

3   Project Scope & Purpose

4   Project Background

Australian Country Choice (ACC) and MLA Donor Company (MDC) have agreed to progress a Collaborative Innovation Program over a three year period commencing in July 2018. The program is designed to support the development and implementation of ACC's red meat high value growth strategies in both the domestic and global markets to be achieved via a range of innovative products, packaging, processes and new business model concepts. The specific focus of the program will be on insights and design led innovation approaches to New Product Development (NPD) and Process Improvement - in particular, to drive High Value beef exports. It is noted that in addition to the development of new high value products to meet customer demand, the program may also extend more broadly into the ACC's business activities where opportunities to innovate red meat markets are identified.

A range of new product and business growth activities are planned during the three-year period (but not limited to):

- Market and insights intelligence and analysis in targeted high value markets
- Implementation of design-led approaches for New Product Development (NPD)
- Scanning exercises of new innovative product, packaging, technology and processes and business model designs
- Trade shows and industry events to evaluate new innovative products
- Capture, collate and analyse consumer and market trend data to provide insights to new products and packaging to meet customer demand
- Insight and innovation capability and skill development
- Product evaluations and testing
- Study tours of key international and domestic retail and food service markets of innovative products, processes, technologies and packaging
- Facilitated workshops on technologies, processes and packaging involving suppliers and technical experts

The aim of the three-year program is to develop and implement ACC's red meat high value growth strategies in both the domestic and global markets to be achieved via a range of innovative products,

packaging, processes and value chain concepts.

5 Project Objectives

The overall objective is to develop and implement ACC's red meat high value growth strategies in both the domestic and global markets to be achieved via a range of innovative products, packaging, processes and value chain concepts. The expecation is that majoirty of the program's focus is to be on solutions that create and capture value that at least doubles the current commodity offer and is not simply horizon one business as usual line extensions; rather, a portfolio fo growth options that focus on what's next and what's possible for Australian red meat.

6 Project Outcomes

The contribution of the ACC's Co-Innovation Manager to the overall success of the Innovation Strategy will be determined by qquantifiable improvements in company innovation measures (as agreed), and specifically to the contribution to Insights to Innovation events and network meetings.

7 Key Measures & Accountabilities

The key measures of the ACC's Co-Innovation strategy to the overall success of the Innovation Strategy will be determined by:
- Evidence of effective implementation of ACC's red meat high value growth strategies in both the domestic and global markets to be achieved via a range of innovative products, packaging, processes and value chain concepts.
- Metrics included:
  o Increased % / number of red meat new products presented at range reviews
  o Increased procurement volume of red meat (% of protein supply)
  o Increased value of issue price to customers – transforming input red meat value
  o Quantifiable improvements in company innovation measures (as agreed)
  o Efficient project delivery in accordance with budgets and timelines
  o Contribution to Insights to Innovation events and network meetings

The major activities undertaken by the full-time ACC Co-Innovation Manager were:

- Participate in the development of a comprehensive ACC co-innovation strategy and priorities across the key business improvement priority areas.
- Assist in developing and monitoring key performance indicators and other measures of impact as agreed.
- Develop and maintain positive and collaborative relationships with key agencies, suppliers, stakeholders and key ACC team members.
- Manage and monitor the ACC business improvement portfolio to manage expenditure and track benefits from outcomes generated from ACC projects and activities.
- Support and coordination of site project teams.
- Participate in the development and implementation of cultural change initiatives required across the business to deliver against processing operational metrics and priorities.
- Participate and/or facilitate in independent cost benefit analyses as required.

The ACC Co-Innovation manager has satisfactorily undertaken the full range of activities as described above

8   Project Methodology

The aim of the three-year program is to evaluate and develop ACC's capabilities in application of design-led approaches for New Product Development (NPD). A range of new product growth and new business growth opportunities are planned, including (but not limited to):

- Evidence of effective experimentation and implementation of ACC's red meat high value growth strategies in both the domestic and global markets to be achieved via a range of innovative services, products, packaging, processes and value chain concepts. This is to include agreed metrics between MLA and ACC for a defined increase in a value multiplier created and captured on commodity red meat offer achieved from various innovations. Further, securing incremental growth in new markets and segments will be measured in terms of how insights informed alignment to unmet consumer/market need, input into business strategy and the value and effort to define, build and deliver solutions in these high valued opportunities.
- Actively collecting, collating and analysing various retail, food service, QSR and additional market & trends data.
- Product demonstrations to new and prospective customers of new product and packaging concepts based on market and consumer trends/insights.
- Study tour and scanning exercises of new products, processes, innovative packaging and technology.
- Supplier and technology provider facilitated workshops on consumer-led products, technologies, processes and technologies.
- Documented roadmap by suppliers and providers of immediate priorities for ACC to implement cost effective solutions to provide operational efficiencies.
- Attend local and international trade shows.
- Review of technical and trade barriers to entry for major export markets for value added products including a desktop study of technical and market barriers to major export markets. Specific focus on tariffs, import duties, quotas, labelling, ingredients, shelf-life and order quantities.
- Facilitated process for collecting and collating new product development ideas into insights.
- Documented value added products roadmap and process of determining market insights from data.
- Visits to domestic and international processing operations, packaging companies and meeting with consultants to further examine developments in new innovative products that will inform the development of a value adding strategy and allow ACC to be more responsive to market needs.

9   Project Progress – Co-Innovation Strategy

- Strategic Portfolio
  - o   Develop strategic portfolio of growth opportunities in "value add/insights" theme.
- Value Add R&D Projects
  - o   Manage collaborative R&D projects in "value add/insights" theme.
- R&D Proposals
  - o   Review and provide input into new R&D proposals.
- Report Project Benefits
  - o   Track and report on quantifiable benefits of ACC projects.

10   Project Learning & Development

11   Learning & development plan

The learning & development plan has been developed for the ACC Co-innovation manager. Refer to previously submitted Appendix item Section 7.8 for the learning & development plan (Paul Gibson).

12   Participated in internal and external networks to accelerate outcomes

Participated in internal and external networks to accelerate outcomes, including:
- Co-Innovation & Digital / Supply Chain managers networking event (March 2019).
- Supply Chain & Digital Value Chain Officer Workshop forum (6 & 7 May 2020).
- Supply Chain & Digital Value Chain Officer workshop (1 & 2 December 2020).
- Co-innovation networking workshop (17 & 18 February 2021). Refer to program agenda and topics included in the Appendix (see Section 7:12).
- Co-innovation networking workshop (3 & 9 June 2021). Refer to program agenda and topics included in the Appendix (see Section 7:13).

Guest presenter Joel Bentley ACC presented at the MLA Co-Innovation network meeting (3 June 2021) on 'Leading from Behind' to change behavior. Specifically, Influencing and leading change at ACC's network of farms to capture and use data.

13   Project Steering Committee

Conduct regular steering committee meetings and action tasks arising as required.

The Go/No Go review meeting was conducted as part of the ACC Co-Innovation evaluation independent review meeting on the 22/05/20 where highlights of the project to date (i.e. outcomes of Milestones 1-5) were presented and reviewed by the project steering group. The project steering group approved the continuation of the project to Milestone 6 and beyond on the basis of ACC's current innovation priorities that were presented for the next 12 months (i.e. Approval of the Go/No go decision point). It is recommended to progress to the next phase and expand on the ACC current R&D collaboative priorities (update Strategy on a Page).

A series of strategy meetings between ACC & MLA were conducted in Milestone 9 quarter reporting period, to fulfil stage gate obligations (i.e. after Milestone 8) including (Refer to supporting documents in Appendix):
i)   Digital & data strategy review (i.e. a key ACC co-innovation focus area)

14   Project Steering Committee Tasks

- Preliminary list of target digital applications underway. A spreadsheet capturing all data and digital R&D has been drafted and used to capture all R&D project concepts.
- Update ACC's project spreadsheet with past, current & pipeline projects to include digital & data projects.
- Providing input (with input from ACC's Co-Innovation Manager & Hitachi Innovation Officer) into the Draft ACC Collaborative Strategy page & priorities to present to the project steering group for signoff.

- A primary focus of the role to date has been development of the Cattle Management system (one component of the overall ACC Intelligence value chain system). See Appendix (section 6.10).
- Developed a Learning & Development plan for the Digital Officer (Joel Bentley)

15   Project Systems & Processes

16   Systems & processes for R&D portfolio management

- ACC's Co-innovation manager providing oversight of the co-funded digital officer roles (P.PSH.1159; P.PSH.1223 & P.PSH.1215).
- Digital officers commenced the development of a framework and processes for implementation of red meat digital strategies & R&D projects portfolio.
- Develop strategic portfolio of digital opportunities.
- Data analysis and insight generation process.
- Track and report on quantifiable benefits of digital projects.
- Participate in internal and external networks to accelerate outcomes.

17   Project portfolio management

Summary of current, pipeline and concept projects (as per the project review notes 29/1/2021) – (Refer to Appendix):

i)   Current Contract Projects
P.PSH.1159 – Farm Digital Officer (CP MLA)
P.PSH.1215 - Market Digital Officer (CP MLA)
P.PSH.1223 - Factory Digital Officer (CP MLA)
P.PSH.1238 – ACC-Hitachi Sixth sense
PPSH.1184 – Innovation Manager (CP MLA)
BFLT1016 - Autobunk Management System (IP ALFA/MLA)
BFLT5009 - Truck Effluent (IP ALFA/MLA)
PPSH1268 - Cannon Hill Master Development Plan + Innovation Centre - CHPF (CP MLA)
P.PSH.2058 - Frontmatec Carcase Grade Camera System Trials
P.PSH.1308 - CN30 Co-Innovation Program

ii)   Developing Projects
Product Development Academy Co-Funded Positions x 3
NB2 Program
Virtual Reality Innovation Centre
NEXGEN Collagen Processing
Industry 4.0 Information Management System / STAGE 2
Export Development Officer
Environmental Credentials Project
Staff Acquisition Programs
Market Category Driver Assessment Tools Project
New Generation Export Packaging
Goats Supply Chain
Cattle to Carcase Yield + Quality Prediction Modelling

Integrated Stim + Chill Management System - STAGE 2

iii)	Pending PIP Projects

FRP100393 Lab Test On-Line Reports System - ACC GROUP
FRP100388 Cold Chain Monitoring System - CHPF
FRP100387 Meat Messaging System - CHPF
FRP100392 Lumachain Feedlot Pen Module - OCFL
FRP100402 Dag Removal Management - CHPF

iv)	Current PIP Contract Projects

PIP2020-1070 Hides Identification + Defects Grading System Stage 1 - CHPF (CP AMPC/MLA)
PIP2020-1006 Factory Energy Management System / ISO50001 Standard Certification Feasibility - CHPF
PIP2021-1053 Hide Collagen Feasibility Study - CHPF (CP AMPC/MLA)
PIP2021-1057 Project Innovation Officer - ACCGROUP (CP AMPC/MLA)
PIP2021-1055 Bio-actives Program (blood + bone) - CHPF
PIP2021-1020 Energy+ Water Measurement System - CHPF (CP AMPC/MLA)
PIP2021-1038 OHS Innovation Manager - ACCGROUP (CP AMPC/MLA)
PIP2021-1056 HR Innovation Manager - ACCGROUP (CP AMPC/MLA)
FPR 200940 Lumachain Factory Boning + Chilling + Slaughtering Modules / STAGE 1 - CHPF
FPR Lumachain Factory Boning + Chilling + Slaughtering Modules / STAGE 2 - CHPF

v)	Current collaborative projects

PPSH.1184 – Innovation Manager (CP MLA)
BFLT1016 - Autobunk Management System (IP ALFA/MLA)
BFLT5009 - Truck Effluent (IP ALFA/MLA)
PPSH1268 - Cannon Hill Master Development Plan + Innovation Centre - CHPF (CP MLA)
PIP2020-1070 Hides Identification + Defects Grading System Stage 1 - CHPF (CP AMPC/MLA)
PIP2021-1020 Energy+ Water Measurement System - CHPF (CP AMPC/MLA)
Barkly Black Cattle Heat Load Trial

vi)	Active ACC trials (non-collaborative projects)

Future Food Seaweed
Transport Effluent
Frontmatec / Masterbeef/ Microwave/ Viascan Carcase Grade Camera
MEQ Carcase Probe
Hide Laser ID
MIJ Camera
MLA Exo-Skeleton
Wagyu MB x Time x Chill
Jarvis Knife Steriliser
MLA Dags Chemical Enzyme Wash
Konica Minolta 3D Print
CSIRO REIMS
Cold Chain Shelf-Life Prediction Model

Cattle to Carcase Prediction Pilot
MLA Deakin Traceability Program

18   Project Digital & Data Capability (a key Co-innovation focus area)

19   Protrace

A key focus has been ongoing development of Protrace to integrate with the ACC Cattle Management system, specifically:

- Working on multiple updates of the software with Protrace developers that include AI & Joining sessions, Bull/Sire inventory, Bull/Sire health, individual property cattle inventory.
- Testing and suppling feedback on new updates, once updates were validated update manuals and procedures.
- Working closely with ACC's on ground Protrace support for properties.

20   Power BI

Power BI/Reporting has been an ACC co-innovation priority:

i)   Properties
- o   During the property discovery exercise has seen the roll out Power BI to all properties:
    1. Property Induction Report
    2. Branding Report
    3. Check Weigh Report
    4. Pregnancy Testing Report
    5. Property Exit Report
    6. Feedlot Induction Report (linking property and feedlot data to get whole of life property information)
    7. Feedlot Exit Report (linking feedlot and property data)
    8. Feedlot Health Report (linking feedlot and property data)
    9. Kill Report (linking feedlot, kill and property data)

- Positive feedback with in-principle support to automate reporting produced from their crush side data collection.
- The key message when talking about data and reporting to properties is always about the integrity of the data.
- As previously mentioned since the introduction to Power BI the accuracy of data collection has improved.
- Made additions and amendments to property reports in BI throughout the quarter.
- Current reports being worked on to be published in the next couple months include, property and group inventory (by class, sex, weight category etc.), paddock book, forecast/turnoff tools.

ii)   Feedlots
- There have been several feedlots BI reports published and released to the three feedlots.
    1. Feedlot Inductions
    2. Feedlot Exits
    3. Mortality Report
    4. Feedlot SOH

5. Gross Margin Detail Report
6. Vendor Feedback
7. ADG Performance
8. Feedlots KPI's

- Over the next couple of months there will be several other feedlots reports being published which include, Historical SOH, Feedlot Health, Trucking & Forecasting, MOBS Data
- I have been working closely with all feedlots to deliver reports that deliver value operationally day to day and also to help with making better decisions in the future.

21   Cattle Management Intelligence (CMI)

Cattle Management Intelligence (CMI) remains a key focus, with the following developments:
- Due to covid disruption, there have been limited developments since the last quarter, resulting in delays in starting the pilot demonstrations (previously scheduled for July 1)
- A briefing paper is under development (with a detailed work plan and schedule) and will be shared with the project steering group prior to the next steering project meeting (proposed to be scheduled w/c 6 July onwards (subject to availabilities).
- The current challenges (primarily due to covid disruptions will be addressed the steering review meeting, including:
- No clear communication on the development plan and when ACC will be testing and implementing the pilot.
- Development of the minimum working prototype is progressing, awaiting an update form the Hitachi Development team.
- It is recognised that resourcing of the testing and implementation (and ongoing technical support) will need to resourced with the appropriate ACC & potentially MLA support. A proposal to be presented to the project steering group for a proposed facilitated adoption proposal to be co-funded between MLA & ACC.
- Noted there is currently limited capacity to support Protrace and CMI operationally.
- A program of work is required to support roll out including training to support uptake and technical support for Protrace and CMI across 12 properties in the group (ACC & ACBH).
- The success of the project will ultimately come down to a successful roll out, training and dedicated ongoing operational support.

22   ACC dashboard analytics (end to end)

- We have co-funded ACC roles to develop enhanced digital/data capabilities with full end-to-end SC coverage with oversight by ACC's CCO. ACC refers to the "ACC data lab" as an operations independent (of 3 x CEOs) source of truth.
- ACC starting to see the benefits and impacts from the culmination of a suite of strategically phased collaborative projects with ISC & MLA, managed across the ACC Co-innovation strategy program.
- A full suite of data / digital capabilities is being developed, including:
  - Connectivity across properties & feedlot operations
  - Integration of multiple IT systems / platforms (from 30+) transitioning across Power BI
  - Full end-to-end supply chain data/digital integration for real time business decisions
  - A suite of data/digital systems developed and being used daily (screenshots of a suite of business improvement analytical dashboards being used daily – some being refreshed hourly) linked to profitability & productivity metrics
  - Animal disease / mortality dashboards built (& continuing to develop) & being used daily to create "heat maps" of properties and handling procedures that resulted in higher incidences

- o Cattle management system – significantly developed with integration of ProTrace, the platform development and the various user interfaces and processes: SMA, DVR, Paddock Book, Management Accounts (Mobsdata and Inventory Reconciliation)
  - o Predictive (profit & productivity) forecasting capabilities being developed for individual cattle at any part of the cattle production life cycle
  - o Dashboards include over 1M cattle since July 2017 (plans to be expanded)
- ACC Ops GMs & ACC buyer now using dashboards to make daily business decisions (see highlighted current reports/capabilities). Examples of current applications & benefits are:
  - o Property crush side data now uploaded and used to develop feedlot induction criteria / rules (the day before induction)
  - o Non-productive cattle (determined from daily gains data) identified at properties during strategic muster points are being culled and removed from the system
  - o Animal disease, sickness & mortalities data (which they may have always recorded) is now been analysed daily to create heat maps of properties and handling practices that are higher risk supply chain points
  - o Offal condemned is being monitored down to individual pieces and mapped back to properties (productivity and yield improvements benefits being monetised with profit/loss $ dashboard outputs).

- ACC Aspirations (using property check weight reports & historical end point data over a 1M head estimated 40-50 on-farm/feedlot measures captured per head) to be able to forecast the profit / loss of individual cattle at any point in the cattle production life cycle [Note this is an aspiration of other supply chains, with proposal(s) currently with ISC & MLA now].
- Plans to ramp up feedback back to producers (both ACC properties & estimated 35% external vendors) – using productivity gains, compliance (disease & EQ etc) & yields back to producer. Priority initially for practice improvement.
- Next prioritises (after cattle management) will be property assets, maintenance, property / feedlot / processing utilities (water, energy, waste management) – all to be dashboarded in the same way as the cattle management system.
- Because each of the dashboards have monetised fields, opportunity for ACC & MLA to determine the impacts & benefits of past and present collaborative (suite of) projects. ACC starting to focus on key areas of business improvement now using the dashboards, with profit enhancement by focusing on the data and practice change e.g. offal condemnation is an area they had recently reduced by 20% by focusing on it (estimated). Potential to do an impacts analysis.
- We are well positioned with the MLA-Hitachi sixth sense project in place (the primary lessons have been to develop connectivity solutions to connect the operations as a priority, having internal champions in place (digital officers and company structure aligned to doing more with data), having senior management and owner buy-in & ownership. With this now well established, ACC is well placed to develop & implement Hitachi PI across the entire end to end supply chain (project P.PSH.1238).
- It is proposed to convert the Cattle Management system across the Lumada (as part of the front end of the Sixth sense project) to fast track a minimal viable product that we can continue to develop and build on over time (by ACC).
- Also in discussions with ACC, seeking the project steering group approval as a priority for their input and support on rolling / adoption of the data capture systems (including Cattle Management system) across all ACC & ACBH properties & feedlots.
- ACC are looking to introduce new sensors and data capture devices over time. Again well positioned to introduce new devices over time.
- Proposed that we consider MLA communications to start to feature key case studies to promote the achievements to date and work ahead of us.

MLA-ISC has been on a five year journey with ACC on data/digital enhanced capabilities (identified as abbreviated project titles):

- P.PIP.0513 - ACC Processing Young Food Innovator trainee Glenn Bullock (project 1)
- P.PIP.0514 - ACC Agribusiness Young Food Innovator trainee (project 2)
- P.PIP.0515 - ACC BeefSpecs
- P.PIP.5008 & p.pip.0446 - ACC Collaborative Innovation Strategy Partnership (CISP) program - Stage 2
- P.PSH.1223 - ACC digital processing officer
- P.PSH.0826 - ACC eNVD
- P.PSH.1056 - ACC connectivity Stages 1&2
- P.PSH.1057 - Hitachi-MLA Co-innovation officer (primary focus on development & implementation of Cattle management System)
- P.PSH.1080 - ACC HF-ear tags
- P.PSH.1096 - ACC's Integrated Information Management System (Digital)
- P.PSH.1147 - NLIS replacement
- P.PSH.1159 - ACC digital officer
- P.PSH.1215 - ACC Marketing Insights SC Manager
- P.PSH.1184 - ACC Co-Innovation Manager
- V.RDP.2108 ACC animal disease data pilot study project
- V.RDP.2010 - Rural4Profit - OCM (ACC)
- Hitachi projects managed by Nigel (P.PSH.0815 – ACBH Croydon integrated data capture & analysis; P.PSH.0859 - Eagles Nest; P.PSH.1077 – Connectivity International Vodafone solution; P.PSH.1162 - HPI mobile UAV)

Overall, ACC has continued to make significant progress in the development of digital strategy & business analytics systems. Steering group consisting of ACC and MLA is formed. The Digital strategy and priorities has been further refined awaiting steering group approval. A number of R&D opportunities have been identified and implemented to enhance ACC's capability.

Product Pricing Modelling has also been a focus of the current Milestone 4 period of the digital data capability project;
- Completing various product pricing for new business in the further processing department
- 3 new customer lines
- Analysis of overhead allocations

A primary focus of the current quarter period has been the development of the Power BI and modules, including:

i)   Offal Yield Reports

ii)   Boning Room Yield Report

iii)   Manufacturing Production Report Scoped and Drafted

iv)   Primary Processing KPI

v)   Procurement KPI

vi)   Chain Speeds

vii)   Scoping Human Resources KPI

viii) Current Stock on Hand

ix)   Customer Based Yield Reports

x)   Product Pricing Modelling

xi)   Various Adhoc requests

The current project has significantly contributed on generating timely and useable information from the significant amounts of data that ACC & ACBH collect. Noted that ACC acknowledges the benefits of the co-funded roles. So far, all managers and General Managers across properties, feedlots and processing have been impressed with the information available and the requests for additional reports and information are growing (as a direct result of partnering with ISC & MLA including the co-funded digital capability roles).

As a direct result of the achievements and deliverables of the current milestone, the Digital Processing Officer now has been assigned and has oversight of the management of the report server, including creating/altering scripts, data discovery, and T-SQL job management.

The primary focus in the previous quarter period has been on increasing data transparency by building PowerBI reports to provide real-time information to ACC's Operations managers.

Specifically:
- i)   Offal Yield Reports
    - o Individual reports for 7 customers, updating hourly
    - o 3 month trend, selectable for each category
- ii)   Boning Room Yield Report
    - o Individual reports for 8 customers, updating hourly
    - o 3 month trend selectable for each category
- iii)   Condemned Offal Report
    - o Tracing back to vendor
    - o Trend over time
    - o Per customer per day
- iv)   Animal trace reconciliation
    - o Complete tracing of animal from feedlot to boning room
    - o Ensure complete reconciliation of every animal through processing
- v)   Sex and Dentition Comparison
    - o Compliance report to ensuring accuracy in sex and dentition recording between two facilities
- vi)   Database Modelling and Scoping
    - o Working with external contracts to scope and deliver new data models for further reports
    - o Scoping data models across all areas on the business
    - o Starting working on further processing data
- vii)   Power Bi Implementation
    - o Assisted in setting up the power bi system
    - o Setup up the gateway allowing connection between the online system and server (enabling automatic report refreshing)
    - o Creating workspaces and controlling access to those workspaces

The next phase will continue to focus on building PowerBI reports to provide ACC's Operations managers with information and data to make real-time business decisions.

23   ACC end to end ERP

ACC is currently reviewing and evaluating options to integrate their data capture and analytical capabilities aligned with their data transfer needs. ACC is in the process of linking all their disparate systems together to enable them to have improved real time reporting systems to make better informed business management decisions. In addition, ACC's business as a dedicated supplier to a single client is transitioning with an opportunity for ACC to develop business with new customers. To

enable ACC to tailor their business they are setting up a data lab that will include a data analytics and insights team covering agribusiness, processing and marketing. This will enable ACC to make sure their beef products are providing what their customers' needs are as well as making sure their animals are meeting marketing specifications.

A portion of the Digital officer's time is and will be dedicated to the ERP project for the next 10 months. The Digital officer will be the Agribusiness lead SME working with The Red Rock consulting team as well as the ACC internal team.

Resources will be the big challenge as a proportion of the Digital officers time will shift to the ERP project.

24 Digital Officer miscellaneous roles

Day to day roles and responsibilities of the Digital officer include:
- Completed feedlots reforecast schedule with Feedlots GM
- Completed multiple breakeven calculators for feedlots and properties
- Gross margin close out reports for properties
- Assisted on various models on potential new Property purchases

25 Capturing Carcase Value priority

There was a planning meeting conducted with ACC data lab team and MLA on "Capturing carcase value." The next phase will continue to focus on building PowerBI reports to provide ACC's Operations managers with information and data to make real-time business decisions. In addition, the next quarter will also focus on expanding from the outcomes of the "Capturing carcase value" meeting.

There was a subsequent follow up discussion between MLA and ACC data lab team. ACC has already conducted a significant amount of analysis in this space but agreed to discuss with MLA. ACC indicated that they have looked at building a predictive equation / model based on existing data.

26 Project Data Lab Agreement – Proposed updates to contract objectives (i.e. Steering committee meeting)

It was agreed to extend the digital on-farm office role and alignment with the other digital supply chain roles. It was agreed to consider some terms and conditions related to the KPIs and deliverables of the extended digital agribusiness role, including updated contract deliverables to include evidence that the business has trialled and where relevant implemented the following initiatives (to be reviewed and agreed by ACC). The next phase will continue to focus on building PowerBI reports to provide ACC's Operations managers with information and data to make real-time business decisions. In addition, the next quarter will also focus on expanding from the outcomes of the "Capturing carcase value" meeting.

27 Agribusiness digital role [P.PSH.1159]

- o Measurement of liveweight on-farm to better predict average daily weight gain (ADG) by animal / farm / paddock.
- o Use of rainfall and pasture measurement technologies to develop a Food on Offer (FOO) estimator i.e. kg DM/Ha/100ml. Use this information to predict pasture availability over

the next quarter and to improve the accuracy of the ADG predictor and inventory management.
- o Link to MLA Data platforms to upload ACC data and integrate disaggregated industry data to benchmark ACC performance against broader industry – Disease, MSA score, offal condemn etc.
- o Provide feedback to producers that enables them to make better management decisions that create additional value for industry.
- o Commence the development of systems to collect and analyse soil Carbon data across ACC properties.
- o Ensure business rules exist to validate data accuracy prior to inclusion in databases.
- o Ensure that ACC data capture, transfer, integration and reporting functions are adopted and used across the ACC farm and feedlot team.

- Develop a priority Power BI report that tracks the performance of the top on-farm / feedlot profit drivers and build into a Power BI dashboard that is adopted, understood and used on a weekly basis by managers across the business. Indicators likely to include ADG, deaths and disease, stocking rate (DSE/100ml Rain/Ha), and for breeding farms calf mortality and fertility (% cows scanned in calf) to deliver profit / loss /$Ha.
- Develop an 'exception Power BI report' which highlights major variations from baseline for a range of farm / feedlot indicators these are reviewed by the business to understand why the variation is occurring and the potential impact to business – i.e. % cows / heifer scanned in calf etc, offal condemns, MSA non-compliance.
- Dedicated communications plan to deliver up to four farm / feedlot case studies these will be shot as 2-3-minute videos;
    - o Ag-Tech adoption and lessons learnt (Hardware)
    - o Developing systems to capture, interrogate and report farm / feedlot data (Systems – Power BI)
    - o Using data to inform better farm decisions – ADG estimator based on rainfall and FOO
    - o Providing feedback to farms / Feedlots including carcase data and offal condemns etc.

28   Factory digital role [P.PSH.1223]

- Communication of objective measurement outcomes
- Using data to identify opportunities to upcycle waste streams into to new products,

29   Market digital role [P.PSH.1215]

- Completion of MLA's Category Growth Driver analysis for ACC
- Review the potential for ACC brands to be underpinned by the MSA Cypher as opposed to dentition
- Updated contract deliverables to include evidence that the business has trialled and where relevant implemented the following initiatives (to be reviewed and agreed by ACC).

    - o COP estimator and product prioritisation model for NPD based on profitability
    - o Development of a treasury function to identify most profitable markets in real time
    - o Development of a product prioritisation function for the collection of co-products and non-traditional cuts – i.e. at what $/kg is it profitable to collect XYZ

- Develop a priority Power BI report that tracks the performance of the top product and market profit drivers that is adopted, understood and used on a weekly basis by managers across the business. Indicators likely to include X-Rates, production decisions for branded programs, real time COP calculator $/kg/cut to provide the business with a carcase cut out cost by primal (similar to the USDA carcase cut out indicator). This information can also be used to develop a ACC 3 month demand outlook.
- Develop a 'Power BI exception report' which highlights major variations from baseline for market indicators which can be reviewed by the business to understand why the variation is occurring and the potential impact to business – i.e. loss of sales, product claims / rejections based on microbiology / quality specs, stock on hand (inventory) and carrying value/ cost.
- Dedicated communications plan for up to four case studies these will be shot as 2-3-minute videos;
    - Using data and insights to prioritise markets and the development of company brands.
    - Using data to inform profitable new product development programs – COP for NPD.
    - Using category growth drivers to inform brand development, brand attributes and target markets and customers.
    - Using data to understand at any time where the business sits in relation to product and or market exposure.

30   Program Strategy and Priorities

ACC, MLA and ISC conducted a project steering meeting. ACC provided a detailed update of digital developments in the form of demonstrations of several visualisation dashboards showing how the three roles have integrated to provide end to end business operational dashboards. The outcome of was that the steering committee approved continuation of the project. Also supported was the proposition to align all three roles for a further two years – this is subject to MLA and ACC approval. In addition to the go/no go stage gate meeting, ACC and MLA conducted on- and off-farm R&D bi-annual summits throughout May 2021. (Refer to Appendix, see Section 7.20 & 7.21 for summary of outcomes).

ACC's 3-year R&D strategic plan (2022 – 2024) is detailed in the appendix (See Section 7.22).

31   Priority R&D Programs 2022

FY2022 R&D Priorities	Initiatives / Actions
Farm / Feedlot - TOP 3	
1. Calf Mortality	Calf survival (NB2) – ACC to review participation in NB2 with a focus on calf mortality looking at restricted access to water in early life. (Draft proposal developed)
2. Carbon Neutrality	Carbon Neutrality - ACC to undertake steps to achieve a verifiable net carbon position across the business. (Project underway)
3. Cattle Prediction	Predicting Quality using data (Across business imitative) - A project to understand the relationship between EQ, LMY and health on carcase value and the relationship with farm / feedlot data has commenced. If this is successful it may supersede the need to use OM technologies on Farm/Feedlot to predict quality and yield into the plant. A report with be provided to the heads of the business on the

	findings. Depending on the success of this project a subproject (a below) may be undertaken in the feedlot. (Concept under review)
Factory - TOP 3	
1. Waste Management	Upcycling waste – ACC want to reduce energy, recycle water and recover (upcycle as many waste streams as possible).
2. Water + Energy Management	A turn key solution is attached that may have the potential to turn key ACC waste streams into profit (Concept for review – AMPC to lead)
3. Carcase Prediction	Predicting Quality using data (see 3 above) - A project to understand the relationship between EQ, LMY and health on carcase value and the relationship with farm / feedlot data has commenced. If this is successful it may supersede the need to use OM technologies on Farm/Feedlot to predict quality and yield into the plant. A report with be provided to the heads of the business on the findings. (Concept under review)
Logistics	
1. Cold Chain Management	
2. Shelf Life Prediction	
Market	
1. Category Growth Drivers	Category Growth Drivers / Data analysis – MLA / ACC will review opportunities based on a 120-day GF spec with full on site value adding (i.e. retail ready packaging) and a Ultrablack spec with full value adding to help identify the market potential for these two specifications. A report with be provided to the heads of the business on the findings. (Project underway)
2. Goat Supply Chain	Goats – ACC have asked MLA if it intends to update existing (outdated) reports on goats. Consumption, supply chains, drivers of demand, key markets and growth opportunities.

32 Project Progress

Co-Innovation Strategy – Milestones 1-12 Report

Objectives – Milestones 1-12
Documented at least 10 new ideas / innovations including R&D scope & budgets across the two strategic areas (On-farm & On-factory). Subject to review of progress towards outcomes as detailed in Quarterly report. Since the commencement of the program, at least 10 new ideas / innovations including R&D scope & budgets across the two strategic areas (On-farm & On-factory) including: • New project scope - to develop preliminary scope of "Feasibility & business case for study for dairy calf production system". See Appendix for meeting notes and agreed actions. ACC to provide input scope, time, budget resources (maximum 6 months). Background, objective & outcomes & value proposition. Purpose - To investigate the opportunity to take dairy cattle through to production system to feed on grain identified under a branded product. • Optimise & integration of processing production data and automated diagnostics. Review stimulation, spray chilling & grading practices – technical review using CarneTech as provider. Stage 1 – review, upgrade & integrated / optimise – kill (e-Stun), Stim, chill, spray & grade. Est $150k - Stage 1. ACC to provide project brief, MLA to provide feedback on idea through weekly review meeting.

- Feasibility & baseline review of four operations of energy profiles – Stage 1 Cannon Hill, Opal Creek, Brindley, Barkley Downs. Stage 2 – renewable energy options & integrated solution. Outcome is terms for tender for integrated energy solutions for ACC operations. Est $50k. Action – ACC (PG) provided project brief for MLA, MLA to review & advise.
- ACC Brand strategy proposal – briefing paper for resourcing under development.
- Feasibility of palletised organic abattoir waste for combustion (boiler) fuel & composting / fertiliser.
- Cannon Hill master plan. Estimated - $50k. Action ACC to share project brief with MLA.
- Digital Officer Factory. Action MLA (AS) to share project brief / draft contract with ACC.
- Digital Officer Market. Action MLA (AS) to share project brief / draft contract with ACC.
- Data / digital mapping exercise.
- As a result of multiple marketing strategy sessions, it has been proposed to submit an R&D application to develop capability in developing and implementing a branding strategy for new markets, new segments and new customers. Justification for the project:
- ACC transforming from single client business
- ACC-MLA agreed to collaborate on developing capability to develop & implement marketing strategy from data & insights
- Co-funded marketing & insights Supply Chain manager being reviewed today by senior MLA leadership team for an initial 12 months tenure plus two years option
- ACC restructuring for "data lab" capability with independent oversight of three primary business operations (asked to keep this confidential)
- ACC vision to have data, insights & analytics capability across all parts of their integrated supply chain through to customers
- Currently co-funded roles in place for on-farm (including additional role to support integration of cattle management system) & one new role being considered by MLA for product to customer.
- Currently there is a gap for linking data & analytics in processing.
- Exoskeletons & automation – propositions for ACC business
- (Internal) ACC investigation of hides defects
- Review of effluent management in livestock transport (a proposed ALFA project is under development)
- Global insights session(s) with MLA planned for w/c 9/12 for review ACC's insights data & capabilities
- Indonesia scoping study, with tendering underway and project due to commence in January 2020.
- Hides defects & grading program. Stage 1 – machine readable id. Action – ACC arranging visit to NCMC to discuss defects (MLA to assist co-ordinate NCMC visit, and consolidate defects investigation) & potential for grading system. Status – First draft proposal going pip pathway with AMPC
- ACC Project brief – Greenleaf draft proposal delivered, MLA reviewing. Matt sending a proposal.
- Integrated renewable energy at Opal Creek F/L. RP stage (review options for capital work project vs R&D project).
- Co-products program including blood, bones, hides & organs (bio-actives). Specific products is bloods collagen, hides as targets. Discovery stage.
- Beef cuts value calculator.
- Shelf-life predictor model & temperature sensing devices. Action – ACC to prove through initial trial. ACC to develop trial design.
- Virtual fencing project. Action – MLA to provide update on all past & present work on virtual fencing. Action – ACC to provide scope on trial (Vence is provider). Capital works project.

- Effluent trucking trial. ALFA agreed in principle to fund in feeding curfew and time in transport. ALFA advised ACC of potential time off feed. Trial proposed being designed for ALFA funding. BFLT.4002 – Time off feed. BLIV.0126 - effluent trucking (Aug10). Joe meeting ACC on 20/1 to scope out trial, ALFA to fund work with ACC as host site.
- Feedlot shade (ALFA call).
- Frontmatec yield & quality grading systems.   Action – Frontmatec to provided ACC & MLA with proposal, date for roundtable design workshop and next steps
- Stim & chill optimisation – Scope coming through AMPC stage 1
- Export Container Robotic Autoloader
- Innovation Centre / Master Development Plan (project approved for contracting)
- Group Learning, Training, Education and Development Project
- Lumachain End to End Traceability

Specifically, ACC has focused on the ongoing development and implementation of the Cattle Management System pilot. The Protrace system has been developed and implemented as part of the co-funded MLA–ACC on-farm module package ("p.psh.1096 - ACC's Integrated Information Management Digital system" developed as part of a concurrently R&D project). Other related projects being incorporated in to the design of the Cattle Management System are other concurrent ACC-MLA co-funded projects:

- p.psh.0826 - ACC eNVD
- p.psh.1056 - ACC Connectivity S1&S2
- p.psh.1057 - Hitachi-MLA Co-innovation officer
- p.psh.1147 - NLIS Replacement
- p.psh.1215 - ACC Marketing Insights Supply Chain Manager
- p.psh.1223 - ACC Digital Factory Officer

GENERAL NOTES and COMMENTS

ACC has made significant progress in the development of R&D process & systems. Steering group consisting of ACC and MLA is formed. The Co-Innovation strategy and priorities has been further refined awaiting steering group approval. A number of R&D opportunities have been identified.

Proposed Initiatives / Activities:

- ACC's collaborative innovation strategy commenced development. As the program strategy evolves it is anticipated that specific R&D projects will be developed, and additional resources to support these projects will be considered as required. Each individual R&D project will be contracted via a separate schedule to be attached to the Collaborative Head Agreement.
- Reviewing feasibility and business cases for several new concepts.

SPECIAL COMMENTS

A significant restructure and realignment of ACC's business (November 2020), will see new reporting lines of the Co-innovation and digital capability roles to the Chief Commercial Manager.

ISSUES IDENTIFIED

- Issue with managing R&D pipeline with so much R&D activity across the business, need for a co-ordinated internal process to manage ideas in the pipeline.
- ACC's business as a dedicated supplier to a single client is transitioning with an opportunity for ACC to develop new business underpinned by a branding strategy to supply new customers with a range of new beef products. ACC is currently supplying half-volumes of product to their existing customer (Coles) over a 3-year transition period (commencing 2018), allowing ACC to

start to supply new domestic retail clients (Aldi from January 2019 & Woolworths from June 2019). ACC is requesting MLA's support to develop capability and capacity to deliver a branded beef program.

- The primary focus in the current quarter's activities has been on the ACBH-MLA co-funded Cattle Management System project. While this project has progressed significantly, the project is currently on hold (for the past two months) with limited activities being able to progress pending agreement of the ACC and Hitachi legal terms of operating. A contract is being drafted awaiting ACC & Hitachi approval to progress under agreed licence arrangements. This is expected to be resolved in the coming week to allow the project to progress to Quarter 5.

- Further delays may be experienced in progressing the development and implementation of the Cattle Management System due to the co-funded Hitachi Innovation (via the p.psh.1057 project). An agreed interim replacement officer has been agreed by the ABH-Hitachi-MLA project steering group to commence immediately. With the hand over effective immediately between the current incumbent Innovation Officer and new innovation manager, any expected downtime is expected to be limited.

KEY FOCUS AREAS

It is recommended to progress to the next phase:
  - Develop a Co-Innovation Strategy including – INITIATED with MLA Insights & Strategy Team.
  - Develop framework for development and implementation of ACC's red meat high value growth strategies in both the domestic and global markets.
  - Consider metrics and resource planning and innovation approaches such as design led thinking to achieve business strategies for high value portfolio.
  - Expand on the ACC current priorities (update Strategy on a Page)

Co-innovation focus areas aligned with ACC business priorities have been identified and will be a key focus for the next phase:
  - Sustainability supply chain strategy and a new co-innovation role – currently going through approvals with ACC and MLA
  - Extension and realignment of the ACC data lab (i.e. digital and supply chain roles) – proposition is to extend two of the three roles for an additional two years and align to the existing factory production role.
  - Key business improvement focus areas have been identified through the R&D On- and off-farm bi-annual Summits. An associated list of new R&D priorities and projects are ben refine to focus on over the next 12 months.

33 Project Conclusions & Recommendations

34 Conclusions

Milestone 12 has been successfully achieved by completion of :
- Contract execution – ACHIEVED
- Finalise position description, commence recruitment (Interim Co-Innovation manager appointed) – ACHIEVED
- Form ACC / MLA steering committee consisting of ACC & MLA representation – ACHIEVED; and
- Commenced setting overarching goals, metrics and outline in the form of a draft Collaborative innovation strategy & key priorities – ACHIEVED.
- Develop a Co-Innovation Strategy including – INITIATED with MLA Insights & Strategy Team

- o ACC's red meat high value growth strategies in both the domestic and global markets
- o Define preliminary list of target markets, ocassions, usages, mega trends, product/pack/process/ service ideas and platforms and value chain concepts to pursue.
- o Consider metrics and resource planning and innovation approaches such as design led thinking to achieve business strategies for high value porfolio.
- A key co-innovation strategy priority is digital & data capability. Significant development of advanced digital capability evidenced by > 100 business analytics dashboards used for daily business decisions. This is currenttly being refined over time. The program steering group has in principle supported a realignment of the three digital roles in line with ACC's evaloving bsuneiss strategy to move away from one client to multiple clinets and various busness models (subject to MLA & ACC approval). - ACHIEVED
- A series of strategy session across the ACC priority R&D focus areas – ACHIEVED

35   Recommendations

ACC is currently reviewing and evaluating options to integrate their data capture and analytical capabilities aligned with their data transfer needs. ACC is in the process of linking all their disparate systems together to enable them to have improved real time reporting systems to make better informed business management decisions.

In addition, ACC's business as a dedicated supplier to a single client is transitioning with an opportunity for ACC to develop business with new customers. To enable ACC to tailor their business they are setting up a data lab that will include a data analytics and insights team covering agribusiness, processing and marketing. This will enable ACC to make sure their beef products are providing what their customers' needs are as well as making sure their animals are meeting marketing specifications. The purpose of the project is to provide resourcing to develop and deliver data management and analytics solutions and build on current capabilities in data capture, management and analysts to allow ACC to define the various processes, technologies and required metrics for optimal running of meat and livestock value chains at best practice levels.

 It is proposed that a Digital Officer for the Processing Operations be deployed to develop and implement ACC's digital strategy especially focusing in the processing area. The Digital Officer will be responsible for management and implementation of all digital initiatives undertaken over the initial three years. These end to end value chain roles are expected to inform the digital strategy for the ACC's supply chain.

Both new roles and responsibilities are currently being scoped during the recruitment process. These end to end value chain roles are expected to inform the digital strategy for the ACC's supply chain.

Now approved to proceed, the next quarter will continue to focus on cattle management system and integrated capture and analytics. The above mentioned challenges will be the focus of the next phases of work (to ensure the maximum impact on the business).

36   Next Steps

Co-innovation focus areas aligned with ACC business priorities have been identified and will be a key focus for the next phase:

- Sustainability supply chain strategy and a new co-innovation role.

- Extension and realignment of the ACC data lab (i.e. digital and supply chain roles) – proposition is to extend two of the three roles for an additional two years and align to the existing factory production role.
- Key business improvement focus areas have been identified through the R&D On- and off-farm bi-annual Summits. An associated list of new R&D priorities and projects are developed to refine to focus on over the next 12 months.
- Development of Business Impact Reporting including operational / financial KPI's derived from both direct and indirect metrics collected/calculated from all internal / external supply chain systems. Design of such system to be defined first milestone of the new contract.
- Data collection/calculation to be predetermined at commencement of projects and captured progressive for interim and final reporting.