Innovation Management:

Implementing a preferred business model for delivery by AMPC

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1.0 EXECUTIVE SUMMARY

AMPC directly serves interests of processors and is primarily accountable to that sector. It must quickly develop and galvanize its value proposition to ensure sustainable and proactive support of processors in future based on operating with an effective and efficient network model.

This project began with a brief to develop the business case for "centre of excellence" model for innovation delivery. Based on industry input and AMPC's assessment, a separate centre as such was not a preferred way to proceed, and the model and functions developed in this work are proposed to be applied to AMPC's functions.

The implementation outlined in this document is based on applying the principles of an open model sought by industry to the new organisation model recently put in place by Board and management - featuring Membership, Provider and Stakeholder functions and supporting Corporate Services.

The paper clarifies the respective roles of, and necessary collaboration between, these functions in the delivery of services associated with innovation management. We have illustrated an example in application to a key focus area for innovation – improving energy efficiency – identifying who might do what and where collaboration will be critical to effectiveness and in reducing duplication in the eyes of members.

The paper also identifies important foundation work, including creating an effective collaborative culture backed with appropriate processes, that will can underpin for this approach.

The paper also identifies the rationale and key features of a knowledge platform that can underpin effective delivery of services to industry, improving the access by processors to insights and reducing duplication in search costs. This opportunity was identified by processors as an important plank to AMPC's improved effectiveness.

An appropriate priority-setting process should be developed to suit the new organisation model, industry settings and available resources for R&D projects.

2.0 INTRODUCTION

This document provides a summary of the proposed approach for AMPC's delivery of innovation management to the red meat industry. This document is the final milestone report in that process. It has drawn on consultation with industry which was undertaken during the preparation of the 2nd milestone report.

The scope of our required involvement in this study, and the requirements of this project, altered from the original project brief and workplan, due to decisions made by AMPC management

This paper sets out:

1. What we were engaged and contracted to do;
2. What the industry told us about servicing their innovation needs;
3. A preferred innovation model to address those preferences;
4. How that can be directly applied to the AMPC organisation structure;
5. Implementation priorities including collaboration, the development of a knowledge-sharing platform, engagement and communications

The work done in this project, – and how our brief was altered due to changes in AMPC's situation and requirements – is explained in the section on Methodology.

The paper takes account of a new organisation design implemented within AMPC by the CEO in 2017 which reflects primary external engagement functions – membership, provider and stakeholder – and supporting corporate services functions.

2.1 Background

AMPC administers statutory levies on behalf of the red meat processing industry in accordance with an agreement with government.

While AMPC is the dedicated processing sector R&D agency, it is the minor player in funding total processor sector R&D, leveraging funding for projects and programs from MLA, its Donor Company subsidiary and Governments through each of its three program models – Core, Joint and Plant Initiated Projects.

AMPC services an industry facing challenging economic conditions, and operating in an industry agripolitical landscape that presents significant future threats to existing service delivery models.

There is an increasing need for alignment on whole of chain initiatives. There is fiscal pressure from Governments to achieve better outcomes from industry investments in R&D through Research & Development Corporations, which not beckon consolidation of service provision, but threaten the future co-investment from public spending in R&D in the agrifood sector.

With the increasingly complex operating environment for the processing sector, the innovation demands have shifted over time, yet remain diverse across the processing sector with the differences in enterprise and plant scale, business models, adoptive cultures, and risk exposures.

As a result, available funds have in recent years been thinly spread.

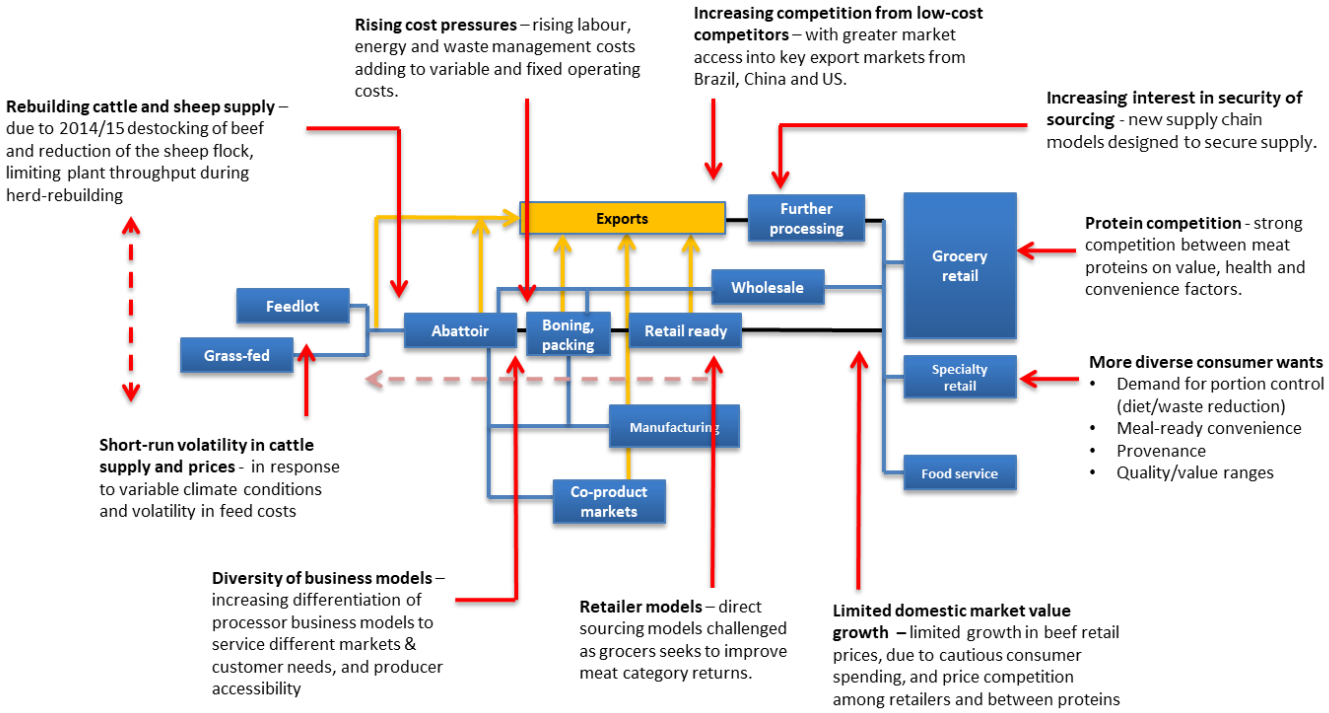
PEEST influences

We have applied the PEEST framework to identify major opportunities and threats affecting innovation in the processing sector.

	Issues	Opportunities	Threats
Political	• Political trend to more isolationaiism, anti-globalisation • Stable Australian political settings, yet rise of marginal political agendas • Fragmented beef industry advocacy	• Stable operating environment in Australia v some competitors • Rigorous regulatory regime which improves product confidence	• Retreat from or weakening in key trade deals • Rising protectionism in some markets • Threats to foreign worker programs • Potential uncertainty over market access • Limited whole-of-chain view in advocacy • Weaker industry leverage for co-investment
Economic	• Increasing affluence in developing world • Increasing competition from low-cost beef suppliers (Brazil, India) • Low growth in post-GFC developed world • Disconnected cattle and beef markets	• Rising demand from developing markets • Preserving positions in premium niche markets	• Consumer focus on value • Inability to compete in commodity markets • Weaker viability of live trade • Innovation less affordable • Limits on available workforce • Currency volatility
Environmental	• Climatic volatility • Increasing community pressure for sustainability outcomes	• Digital tools to improve transparency • Innovative models for waste management • Novel revenue streams from waste streams • Alternate materials to reduce water use	• Reduced throughput over medium term • "Clean and green" no longer enough • Rising energy costs • Rising waste water costs • Greater pressure to reduce water usage
Social	• Increasing dietary consciousness • More discerning consumers • Societal demands on workplace safety • More discerning workforce • Increasing animal welfare activism	• Preserving strong food safety and quality credentials, backed with traceability • Grassfed and other ethical differentiation	• Loss of market share to other proteins • Increasing workplace regulation • Societal rejection of live trade • Labour market competition • Threats to sensitive productivity tools
Technological	• Improving automation • Increasing influence of digital applications • Improving materials science and innovation	• Reduction in repetitive, manual work tasks • Improved product shelf life • Optimise RFID applications in handling	• Reduced reliance on human judgement impacting quality and yield

The beef industry value chain – the medium-term outlook

The major challenges and opportunities shaping the outlook for red meat supply chain define the important settings for the potential role and essential ingredients of a successful innovation delivery model.



2.2 Industry's innovation needs

Findings from the preceding feasibility study

A feasibility study completed in 2015 provides the context for this project, defining the industry's appetite for the industry's co-investment in several key activities, as well as reviewing other approaches across overseas meat industries.

That study found significant support for the concept of a Centre, providing strong guidance as to perceived focus areas of value to the industry as well as risks to be avoided and minimised. That study also identified a strong preference from industry for a "hub and spoke" virtual structural model over any investment in bricks and mortar approaches.

This summary has been developed from the feasibility report

Drivers	**Desirable model**

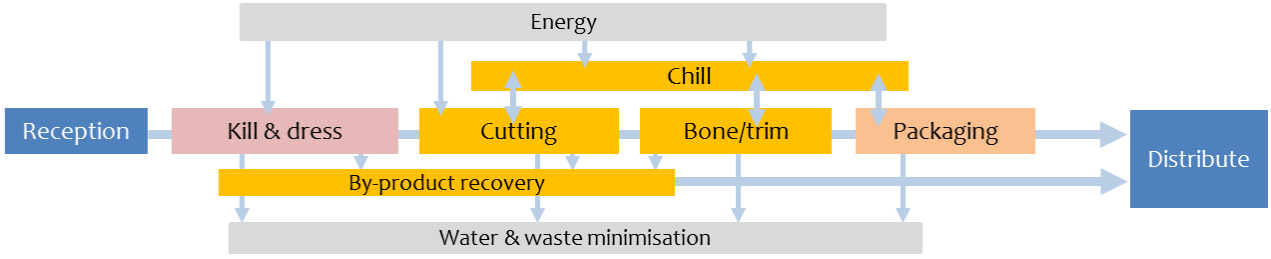
Perceived risks and uncertainties
• Reliability of technology
• Access to support
• Loss of production during installation
• Cost
• Retention of skilled staff
• Finance (Profits or access to industry funds)
	Major roles
	The Centre would need to be both visionary and applied, addressing the following roles based on industry needs:
	• Technology development
	• Technology evaluation
	• Industry demonstration
	• Meat processing and meat science research
	  • Technology for slaughter/boning
	  • Technology for carcase evaluation and measurement
	  • Meat science and quality
	  • Tech for manufacturing and fabrication
	  • Traceability
	• Library database

Major needs • Address rising labour costs • Address rising energy costs • Maximise product quality • Optimise whole carcass recovery	

• Improve productivity in slaughter and boning
• Improve processing efficiency by reducing contamination on chain, product loss on chain/boning/chilling)
• Increase the diversity of available markets
• Product quality (food safety, shelf life, visual quality, eating quality)
• Future workforce requirements (changing with roles, technologies and protocols)
• Address increasing regulation (WH&S, animal welfare, food safety, environmental sustainability, HR)
	• Product innovation
	• Skills development - education and training (industry/students)
	• Other includes;
	  • Information sharing
	  • Extension,
	  • Accessible to all
	  • Collaborative rather than duplication
	
	Structure
	• Strong preference for a virtual centre through a "hub and spoke" model rather than a "bricks and mortar" model.
	• Majority prefer to mitigate risk of new technology through demonstration of technologies within a commercial plant compared to within a Centre.
	• Highly supportive of a model that ensures a collaborative approach.

Findings from consultation

Our consultation with processors identified the apparent scope for innovation applications and solutions through processing operations.



	Kill & dress	Cut & bone	Chill & Pack	Energy/waste
Realities	• Variation in beef carcass size v uniformity in smallstock • Limits on affordability of large-scale automation to SMEs • Critical trade-off between cost and yield in robotic applications • MLA commitment to OCM roll-out	• Most physically demanding tasks • Critical trade-off between cost and yield • Many existing small automation options in use	• Wide range of adaptable generic applications • Many packaging solutions commercially available and in use • RFID advances	• Increasing costs to business • Greater pressure to demonstrate sustainability outcomes • Many solutions in use – relative merits and benefits are unclear
Scope	• Implementation solutions in OCM • Assess scope for gains in work flow/process improvements • Evaluate scope for improvement in vision/sensing technologies	• Improve visual sensing systems automation in boning room • Evaluate and articulate yield impacts v cost gains to assist with decision-making • Improve waste stream recoveries • Managing regulatory compliance of solutions to reduce water use	• Lower-cost refrigeration technologies • Improved automation of carton handling • Improved product shelf-life • RFID to enhance traceability	• Scope for lower-cost refrigeration • Alternate wash-down solutions • Managing regulatory compliance of solutions to reduce water use • Bio-energy applications • Scope for other waste stream incomes • Energy reduction solutions adapted from other sectors • Improve decision-tools to assist evaluate suitable option

These needs and demands vary considerably across red meat processors based on their size, innovation culture, market and seasonality exposures and location.

The priorities of decision-makers

The findings from consultation with industry indicated priorities in servicing the future management of innovation.

Industry requirement	Their priorities
Commercial value	• The model can deliver tangible outcomes to processing enterprises that cannot be achieved under existing industry resources and arrangements • Balances and safeguards the provision of collective industry outcomes as well as providing commercial outcomes for processors • There should be no commercial disadvantage from the industry provision of R&D outcomes
Efficiency and convenience	• Improved engagement and consultation with appropriate management and opinion-leaders • Effective one-stop shop for knowledge and insights to reduce duplication and search costs • Close gaps that exist in current access to expertise and resources • Provides a structure that ensures effective collaboration between industry service providers • Improved project management, by eliciting improved processor involvement in design and management of projects, clarity of decision-points and a focus on timely delivery
The value proposition	• The model can deliver improved industry service and research & development outcomes across all activity areas • The model must not only address priority innovation needs, but also help guard against key industry risks • Appropriate governance and accountability to manage investment of industry levies • Improved performance of the overall investment in industry levies
Scope of application	• Greatest focus should be placed on a set of core industry-good platforms • The model should readily cope with the divergent requirements of different types (segments) of processors • Identify ways to enhance or underpin the incentive to innovate and undertake R&D • Encompasses career pathways, skill gaps and ongoing skills development - as identified on the following page.

Other elements identified in consultation

The findings of the feasibility study indicated there were various other functions related to skills and employment that could fit into the scope of the Innovation Centre.

Aspect	Implication
Incentive to collaborate and innovate	• Seek novel means to ensure flexible funding arrangements which include provide incentive to allow access to test sites/facilities, and take advantage of processors willing to make sites/space available • Support extension of CISP program to compel processor management/technical involvement • Facilitate the availability of test sites (appropriate by region based on relevance and application) to improve access for evaluation and extension
Improved clarity of career pathways	• The model should accommodate a program that clearly articulates career path opportunities that exist within enterprises and across industry
Skills development due to greater complexity and new requirements	• Identify new/emerging skills based on advent of new technologies (such as automation applications) • Identify opportunities for programs and learning opportunities to improve development of management skills in processing enterprises, including leadership and exposure to wider food industry issues • Negotiate faster course identification and development to address needs. • Influence course design to enable tailoring to SMEs

3.0 PROJECT OBJECTIVES

The project objectives as specified in the research agreement are outlined below.

3.1 Objectives

This study will provide AMPC with recommendations regarding the optimum business arrangements, commercial structures and operating framework for the hub and spoke components of such a Centre.

The key objectives of this Centre would be to:

- Facilitate the development and evaluation of new processing technologies;
- Facilitate leading meat processing and meat science R&D across key capabilities; and
- Develop the research and technical skills required by industry in the future.

3.2 Key tasks to be undertaken

The main principles of our approach are to:

1. Consult with industry to put operational flesh on the principles identified in the feasibility study
2. Clearly delineate the pre-competitive space in which the Centre would operate across the focus areas;
3. Develop and test a business model (including all aspects as outlined below in stage 3) that allows cost-effective delivery of those functions to industry;
4. If appropriate, develop a financial evaluation framework that provides projected financial results, balance sheet and cash flows
5. Consolidate – on the basis of the above – and clearly present the business case for establishment and co-investment in a Centre.

As indicated earlier, the scope of the project was amended by AMPC during the course of the work in view of the preference for a corporate structure to cater for innovation delivery, which was based on the outcomes of the Stage 3 Milestone Report, and the internal organisation model that was adopted by AMPC management in June 2017.

This accordingly adjusted the tasks that were undertaken.

4.0 METHODOLOGY

4.1 Project brief

The project scope was altered from the original brief.

Prior work
- Precursor research project (2014-1031) was essentially a pre-feasibility study into the needs of a "Red Meat Processing Centre of Excellence"
- Key findings identified:
  - Major processor needs
  - Major functions of a Centre
  - Critical success factors
  - Structural preferences
- It concluded that the favoured approach was to create a "virtual" centre.

Original brief
- Our project brief was to develop a business case for the establishment of Processing Innovation Centre within the industry.
- Four stages were contemplated:
  1. Ingredients
  2. Business Model
  3. Refined options and communications plan
  4. Recommended preferred model and implementation plan.

Business model
- Stage 2 of the project proposed an open innovation network model.
- It canvassed options for the structure and governance of a Centre, which included models either external to or wholly within AMPC.

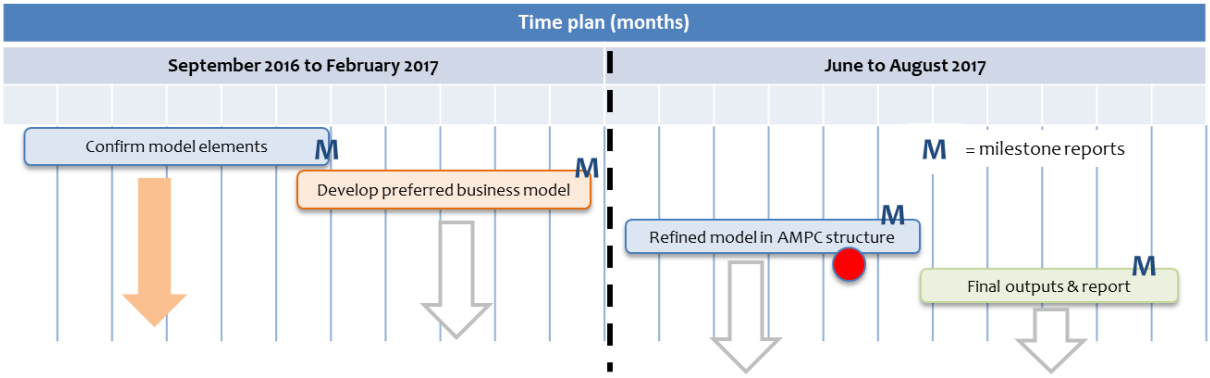
AMPC decision on corporate model

Modified brief
- After stage 2, we prepared a milestone report to AMPC.
- At that point the Chair of AMPC directed us to revise the approach and submit a revised project plan to encompass:
  - Moving forward on the basis that the proposed business would be developed within AMPC
  - Develop an approach to apply and implement the "open model" to all major AMPC external industry services functions
- Following appointment of a new CEO at AMPC in February 2017, work was halted pending consideration of AMPC's organisation priorities and resourcing.

AMPC organisation re-design

Implementing the model within AMPC
- Following the development of a new organisation model for AMPC, we were then asked by AMPC's project manager to revert to the original project plan but amend the workplan to apply the principles of the business model developed earlier to the new structure.
- This document reflects the outcome of the amended workplan.

The timetable in which the work was conducted is outlined in the chart below.



1
- Reviewed scoping study
- Undertook background analysis of innovation needs
- Assess the PEEST analysis relevant to innovation demands and priorities
- Consult with key industry influencers and decision-makers
- Confirm and define the critical aspects that affect future requirements for success

2
- A business model framework including an assessment of the scope for international partners
- An appropriate financial model suitable for 3-way forecasting of the Centre
- Identification of the requirements in terms of positioning, profile, customers engagement, governance and legal structuring

3
- Discussion with AMPC input on preferred structure and governance issues
- Consider issues regarding integration with other industry services functions of AMPC
- Evaluate impact on model of current and potential industry R&D scenarios.

4
- Outline implementation path for application of model to AMPC organisation structure.
- Final business case report
- Delivery of a project snapshot - a concise 1-2 page summary of the research project.

5.0 PROJECT OUTCOMES

5.1 Overview of the delivery model

The key features of the proposed business model for innovation delivery are outlined below:

Objectives
- Improve the outcomes from innovation by red meat processors in areas addressing critical business needs in the future.

AMPC's model
- AMPC will use a "virtual" network model, based on a "hub" facility which will employ a small team managing a number of core functions.
- The Hub will manage a number of relationships with external technology and skill providers mostly located in overseas markets.
- Those focus areas will be grouped by technology or competency area. More than one provider may be linked in the model under each focus area.
- AMPC will "broker" access to technology inputs based on customer need.

Positioning
- The innovation management function is proposed to be highly visible with meat industry stakeholders and participants
- Sustained, strategic and systematic engagement will underpin all activity and ensure industry sees value and relevance in the company's investment of levy funds.

The USP

The unique selling proposition of AMPC is to offer:
- A dedicated, customer focus on the current and future processing innovation needs of red meat processors of all sizes, species and locations.
- The focus takes a whole-of-chain view of processing sector needs, including supply-side realities and consumer-driven needs.
- Reduced duplication of effort and costs in identifying and evaluating solutions
- A model for improved access to insights
- Improved collaboration to achieve greater pre-competitive outcomes

The business model overview

This table describes how the innovation activities of AMPC propose to create, deliver and capture value for the industry.

Key Partners
- Technology providers (global) in a number of focus areas
- Innovations centres in key skill and science areas
- Project facilitators and integrators
- Industry partners and collaborators
- R&D funds providers

Key activities
- Brokering
- Portfolio & technology management
- Knowledge management
- Engagement and communication

See page 18

Key resources
- Staff
- Data services

Value propositions
- Delivery of valued insights
- One-stop shop for technical know-how
- Reduced search and costs
- Improved collaboration in key pre-competitive challenges
- Attentive to diversity of specific sector needs
- Avoidance of cross-sectoral conflicts

Customer relationships
- Processor members (commercial and technical)

Channels
- Direct consultative engagement
- Online portal
- Digital communications
- Technical forums

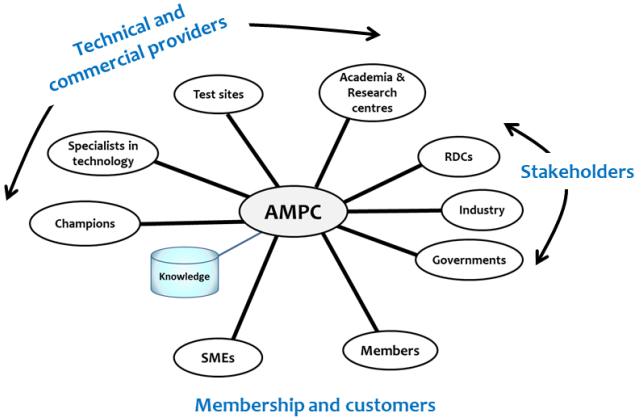
Customer segments
- Segmentation of red meat processors which takes account of
  - Size & financial capacity,
  - Species
  - Information needs
  - Risk appetite
  - R&D attitude
  - Adoptive behavior

Cost structure
- Staff costs based on skill and function
- Travel
- Data system requirements

Revenue streams
- Levy allocation
- Non levy-paying Membership
- Information/insights subscriptions
- Brokerage and project management fees

5.2 The Open Model

An open-network model for the delivery of innovation solutions by AMPC found greatest favour with industry.



The key functions of that model sought by processors include:

- Providing transparent access to services and solutions.
- Brokering access to solutions by processor customers
- Improved knowledge management, including better access to existing resources and knowhow across subject areas
- Achieve cross-pollination of learnings and outcomes from innovation
- Helping identify gaps to guide the portfolio of innovation focus areas (driven by industry need) and drawing on the greater awareness of accessible innovations from the network
- Better oversight and management of project performance and delivery
- Improved customer consultation and engagement

The table below has distilled the processing sector views gathered through our consultation, of various aspects of the determinants, requirements and functions of the model.

	Brokering	Portfolio and technical management	Knowledge management	Engagement and communication
Current state	• Wide range of potential solutions • Unclear benefits analysis • Lack of accessible, pre-competitive guidance • Duplication of effort • Inflexible food safety regulations	• Lack of drive in project management • Slow delivery of outputs and outcomes • Low processor expectations • Lack of processor engagement	• Low understanding and access to "what is out there" • No searchable insights platforms • Duplication of search efforts	• Weak value proposition from collective R&D efforts • Role of AMPC not well understood (vis-a-vis MLA) • Limited engagement and perceived relevance to SMEs
implementation	• Develop relationships with key tech and skills providers in focus areas (based on portfolio needs) • Develop test site protocols and incentives with processors	• Develop/adapt process to identify and monitor processor needs and priorities • Create customer account management system and process • Create project management governance standards	• Create knowledge base • Acquire appropriate knowledge management system • Develop systems to gather, synthesize, capture and disseminate insights	• Establish strategy to achieve necessary profile and engagement • Launch events • Articulate role, activities, customer access through relevant media and channels
Ongoing activities	• Matching needs with solutions • Assess and quality tech providers and their offering • Assist/broker project funding • Manage relationships with tech and skills providers • Facilitate access to test sites • Developing solutions to meet regulations associated with changing operating practices and technologies	• Visit leading events • Monitor technology advances and solutions • Monitor and regularly review innovation portfolio • Monitor project progress and outcomes	• Research, evaluate and qualify application of leading global technology developments • Disseminate project outcomes and insights • Maintain knowledge base • Visit leading events and technology leaders	• Engage processor commercial and technical management • Two-way: understand needs, articulate insights and solutions • Articulate project outcomes and benefits

Features of the model

The following summarises some of the key features of the model:

Brokering solutions

- AMPC acts as a "qualified broker" of requests from customers, such that recommendations as to appropriate solutions have been credentialed based on proven experience and relevance
- It will remain vigilant of international developments in relevant technology and solution applications
- AMPC maintains an "expertise bank" - a register of leading expertise for solutions in relevant fields/technical areas
- Resolving/negotiating regulatory acceptance of improved practices and techniques

Potential network participants

This tables includes examples of some of the potential providers as participants in the network model, which would be assessed and developed once the new approach is in operation, and after consultation with industry. This would be undertaken as part of the foundation work outlined later in the report.

Focus	Examples of potential partners*
Cutting automation	Commercial providers (Scott, Marel, Milmeq)
Meat science	Leading global centres (DMRI, Teagasc MTC, UNE, UTAS)
Refrigeration	Commercial providers (Milmeq)
Packaging	Commercial providers (Packforum/Sealed Air), leading meat technology centres
Product handling	RFID systems providers, carton handling automation providers
Sustainability	Commercial biomass digester system providers;

Relationships with technology and skills providers

- A clear two-way value proposition must be created to underpin relationships with technology providers and skilled specialists
- A potential stream of value must flow back to their host organisation from the engagement
- This may include scope to provide services/solutions into the Australian industry (attractive due to diversity of business models and size), or gain learnings from the Australian industry context

Leader or facilitator

- Each node will have a leader or facilitator, who is a subject expert as part of the structure
- These will be located as required based on their expertise (some in Europe or US)
- AMPC may be required to remunerate these focus area leaders in order to engage their commitment
- AMPC identifies appropriate integrators to work with processors and solution providers to ensure focused project application and pragmatic problem-solving.

5.3 Implementation Priorities

Strong service proposition

Red meat industry settings and future challenges - in particular for processors – demand a far greater focus on achieving optimal outcomes from any collective investments of levy funds and the leveraged co-investments from other stakeholders including government. The competition for available investment funds in improving access to markets, product quality and cost-competitiveness has heightened in recent years against a background of volatile operating conditions and increasingly competitive protein market.

The complexity of the red meat industry in terms of various stakeholder interests and more diverse business and supply chain models puts greater pressure on the best use of these resources. There will be increasing competition in future from industry and commercial sources to service the needs of processing sector across its diverse segments.

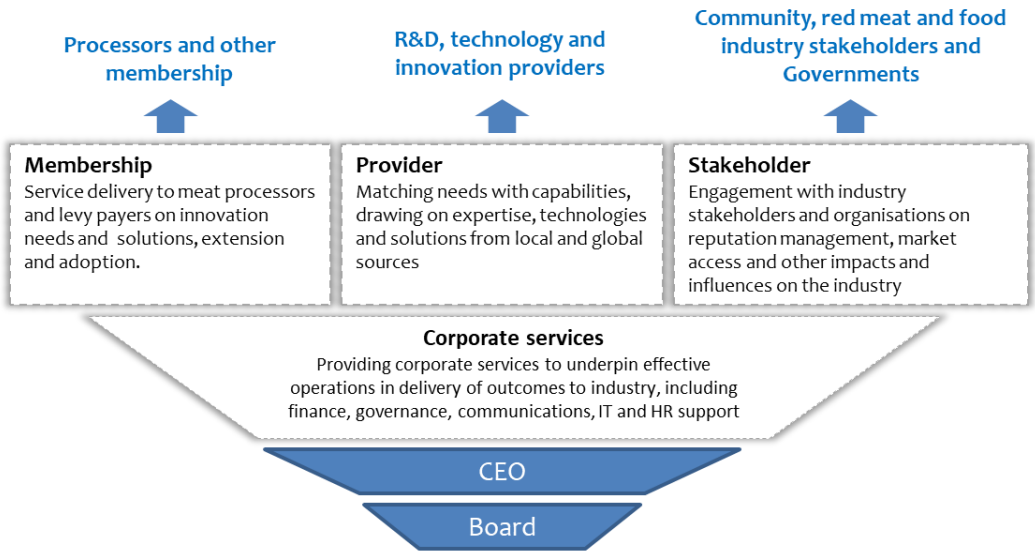
AMPC directly serves interests of processors and is primarily accountable to that sector. It must quickly develop and galvanise its value proposition to ensure sustainable and proactive support of processors in future.

The priority for AMPC to remain a viable organisation model in this future environment is to focus on maximising its value to processors as members and customers as a trusted R&D leader on key sector agendas and as an innovation and capacity development facilitator.

Organisation structure

This overview of implementation priorities is based on applying the principles of the open model sought by industry to the new organisation model recently put in place by Board and Management. The new organisation structure for AMPC has been implemented to respond to the future needs of the company's role within the within industry.

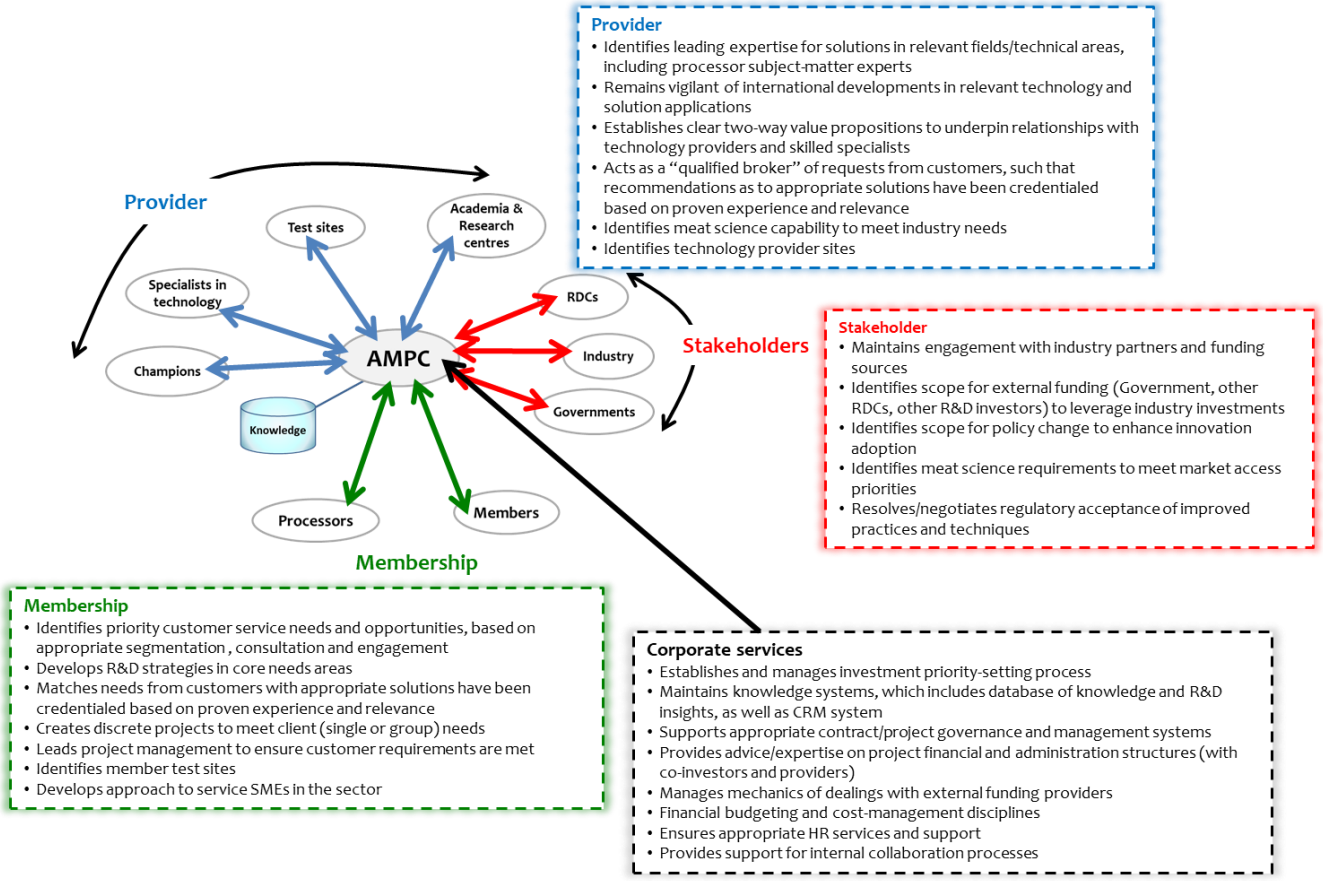
In the following pages, the open model has been applied to AMPC's functions outlined in this chart:



AMPC's core functions

The external-facing functions of AMPC fit well with the network model favoured by industry. The chart below identifies the key functions in each case **relevant to the delivery of innovation outcomes** to the red meat processing sector.

The integration of AMPC's external-facing and corporate services functions into collaborative processes is critical to effective delivery.



Foundations for internal collaboration

There are a number of areas of work with industry and internally within AMPC to create the basis for effective innovation management under the model described in this report, in accordance with the organisation functions and roles. The table below identifies where collaboration across functions will be critical in this process.

	----------Functions----------			
Example	***Membership***	***Provider***	***Stakeholder***	***Corporate services***

External	• Develop and apply a framework to segment processors and members
	• Engage with processors to identify priority R&D needs and opportunities
	• Develop account planning approach across segments
		• Identify capabilities in core need areas
		• For each core area:
		  • Identify subject-matter experts within industry
		  • Identify thought leaders in external providers
			• Map relevant organisations, their role and influence in innovation management
			• Prioritise according to importance and influence to AMPC
			• Identify areas for potential investment fund
			• Identify access to available funding programs and their requirements
			• Collaborate with AMIC on SME needs
				• Identify appropriate partnering models for test sites
				• Establish guidelines for co-investment options

	• (Lead) Develop R&D strategic plans across in each needs	• (Assist) Develop R&D strategic plans across in each needs	• Identify appropriate/potential investment partners	
Internal	• Assess outcomes of recent study into SME needs and risks		• Assess outcomes of recent study into SME needs and risks	• Instigate priority setting process to allocate investment funds
	• (Lead) Provide input to requirements and development of knowledge hub			• (Assist) Develop knowledge hub through IT services
	• Commit to effective collaboration procedures and processes (meetings, cross-consultation, use of supporting CRM and knowledge tools)			• Develop/maintain effective collaborative administration and information support and monitoring systems as directed

Approach to collaboration for example application

Rising energy costs are a common challenge across food processing – especially in red meat processing. Identifying innovation and cost-saving solutions is an ideal subject-matter to identify priority projects as well as to develop the collaborative model. The table below identifies where collaboration across functions will be critical in the delivery of effective outcomes in this example process.

	----------Functions----------			
Phase	***Membership***	***Provider***	***Stakeholder***	***Corporate services***
Preparation	• Review applicability of prior work to established processor segments	• Assess past research	• Assess past policy initiative and influence	
Needs and capabilities	• Drawn on strategic/account plans developed • Map common areas of unmet need across segments	• Identify expertise in core areas • Identify appropriate project experience in related sectors • Review past work to avoid duplication • Identify subject-matter experts	• Identify which stakeholders have developed positions and capability in this space • Identify government programs & funding sources • Identify potential policy levers	• Knowledge hub to provide insights
Priority setting	• Identify priority unmet challenges and needs related to energy (use, waste conversion)	• Identify greatest scope for gain from various applications and technologies		• Develop and apply criteria to meet strategic plan & budget
Delivery	• Develop project application	• Identify appropriate resources and inputs		• Appropriate funds in line with budget/strategic plan
	• Supervise, client liaison • Facilitate processor input	• Assist co-ordinate provider resources and expertise		• Facilitate co-funding arrangements if appropriate
	• Lead project management	• Assist project delivery with tech inputs		
Outcomes	• Learnings across sector • Extension opportunities for SMEs	• Develop/source toolkit solutions	• Assess policy outcomes/actions	• Develop appropriate dissemination • Store in knowledge hub

5.4 Knowledge resources

Direct outputs from projects and their extension across industry are not widely accessed or used. These materials are, in the main, held in an AMPC website search engine, but not stored in a way that enables intelligent searches on relevant technical or functional keyword subjects, nor does it contain or cross-reference to a wider body of knowledge and insights.

The accumulated know-how and insights from total RD&E activity (including experience from its application) is difficult to access, diminishing the perceived commercial value of past, present and likely future investments across industry.

The scope for shared insights within the red meat industry goes much wider than the outputs of R&D projects. There are limited shared resources or extension aids and tools to help processors apply findings from past work.

There is a greater demand from processors for solutions for common challenges, such as improved environmental outcomes, improving yields, reducing waste, minimizing energy use etc. There is also greater need to access expertise in relevant areas of potential processing improvements – whether local, national or international.

At present, there is significant duplication in accessing knowhow, providers and searching for past project outcomes.

Improving value, enhancing collaboration

Enabling effective access to existing and future know how will require greater flexibility and agility – the scope of the insights provided to AMPC members must widen over time, and the need to customise to suit user demands in future will increase as the use of such a tool matures.

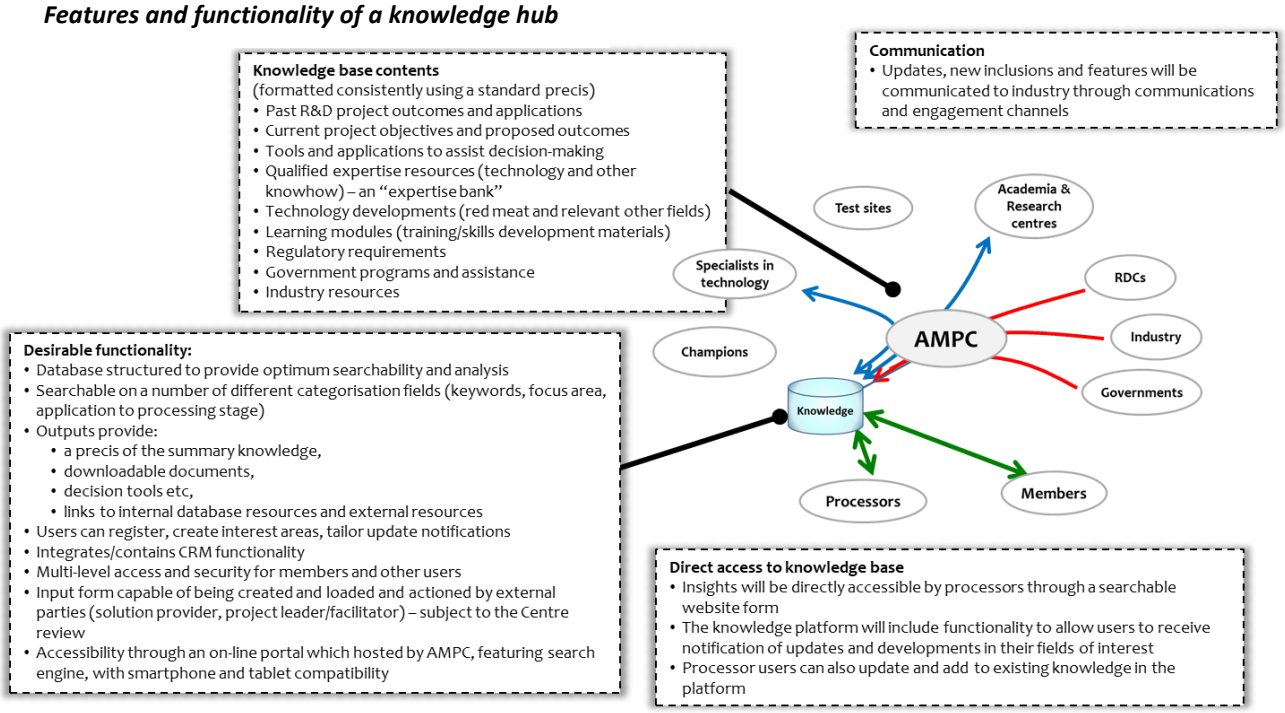
A sophisticated central knowledge hub that firstly captures existing knowledge and allows ongoing expansion will be a vital tool to underpin AMPC's delivery of innovations solutions, and to create a better value proposition to its membership and the broader industry.

A knowledge platform that is open to contribution from industry users can provide a tangible way for collaborators to efficiently share knowledge with others, and underpin the strength of AMPC's open business model.

Proposed Industry knowledge base

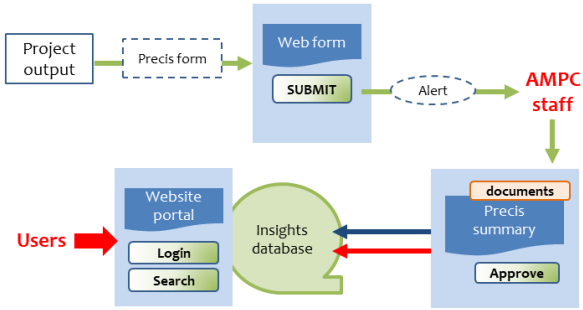
A critical resource of the Innovation management activities of a knowledge management system which will employ a suitable database system of insights and knowhow to inform processors, members, providers and stakeholders. The platform will be developed and maintained by AMPC, with direct access for industry participants.

Features and functionality of a knowledge hub



A critical resource of the Innovation management activities of a knowledge management system which will employ a suitable database system of insights and knowhow to inform processors, members, providers and stakeholders. The platform will be developed and maintained by AMPC, with direct access for industry participants.

Simplified work flow diagram



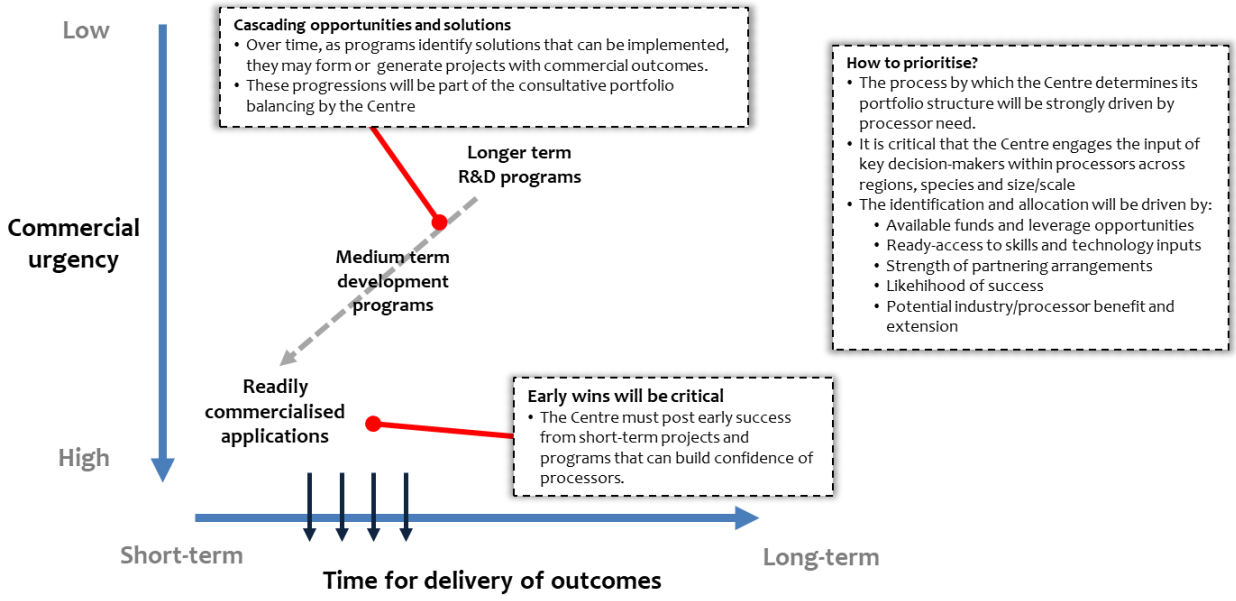
The aims of a project to design and develop such a facility would be to:

- Improve collaborative knowledge management and access within the red meat processing sector to R&D outcomes, insights and opportunities;
- Enable ready access to the outputs, outcomes and learnings from RD&E as well as a range of other resource and decision inputs and insights to processor decision-makers, researchers, service providers and other stakeholders;
- Create a two-way knowledge platform that facilitates and invites contribution from industry participants and solution providers;
- Deliver a platform that has a long life with expansion, adaptability and relevance to many applications, as well as relevance across membership, processor and user segments;
- Develop and deliver an efficient process for growth and maintenance of the platform, taking account of the need for low-cost but timely management of the workflow processes by AMPC;
- Develop a plan to effectively communicate the scope and opportunity from use of the platform;
- Develop a strategy and business model framework for on-going funding and resourcing of the knowledge hub.

5.5 Priority-setting

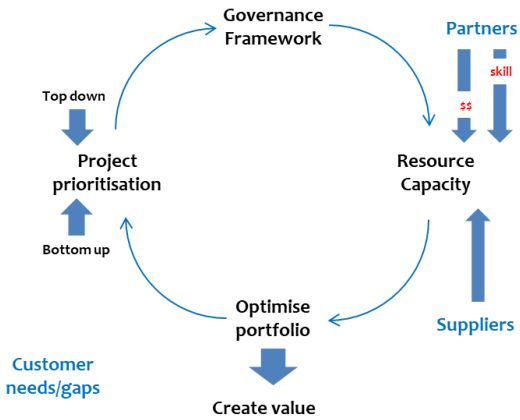
Portfolio development and management

AMPC will assist industry's investment in innovation projects by influencing a balancing the portfolio of projects and programs across time horizons which respond to the strength of commercial needs of processors, which is likely to fall into segmentation as represented below. The prioritisation and allocation of specific projects and programs into each of these will build on the process undertaken by AMPC in 2016/17 and draw on strong input from the commercial and innovation management of processors. The allocation will be governed by available funds (including opportunities to leverage funding), the scope for investment returns and benefits across industry, and the proximity to commercial application in each case.



Upgrade processes for new model

There will be a need to enhance existing investment priority setting processes to the new AMPC organisation structure and the open-network innovation model.



The following considerations are relevant:

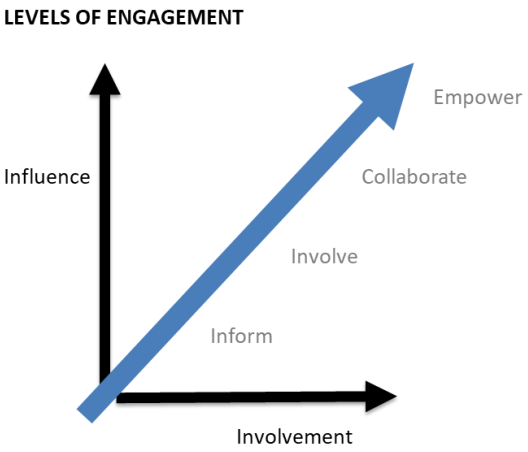
- Engage appropriate participants and expertise from membership and providers to identify strategic R&D focus areas in development of strategic plans.
- Membership engagement as part of account planning work will identify priority needs.
- Engagement with industry partners will be ongoing to collaborate regarding the appropriate roles for origination of sector/enterprise specific versus whole-of-chain initiatives
- The framework on the right – balancing available resources and capabilities to priority projects

will be managed by Corporate Services but draw on Member, Provider and Stakeholder team leaders as appropriate.

- At a project level, this will require evaluation of the optimal investment mix based on scope for improvement, genuine gaps in capability and the materiality of the benefit to members.
- Allocations between needs of the three innovation horizons (see over) and maintenance requirements (i.e. to support SME needs).
- In the short term at least, Horizon 1 projects and programs are likely to dominate the portfolio due to the need for AMPC to build trust with members and processors regarding the delivery of outcomes

5.6 Engagement

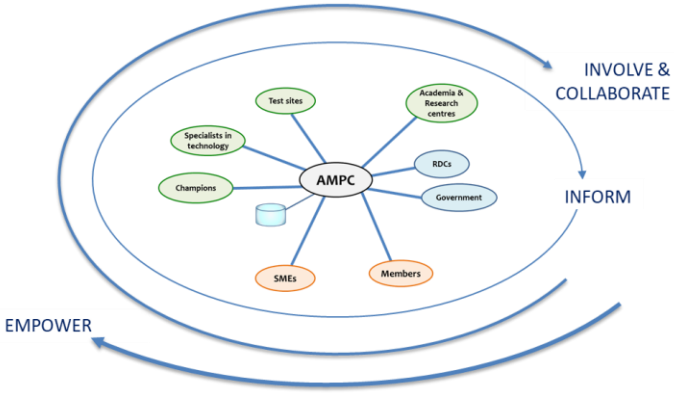
Informed, strategic and systematic engagement across the three operational areas – members, stakeholders and providers – is essential to the success of AMPC.



It is recommended the identification and mapping of members, stakeholders and providers is framed consistently, within the International Association of Public Participation engagement spectrum. This spectrum considers the promise AMPC is making to each group and prioritises what level of engagement and communications is undertaken.

Members

Engagement must be based on a systematic assessment of members and their needs. A baseline understanding of requirements and expectations of innovation, and drivers for uptake will provide a foundation for remodelling R&D generation and manufacture.



Member engagement is at the heart of an innovation model. It will seek to empower them in determining and driving AMPC's R&D focus, with an understanding of and support for the company's priority setting process.

The objective of engagement is to ensure end-users actively contribute to project development and design.

A useful KPI will be number of projects and number of processors involved at design, development, delivery

Co-design of projects and programs will increase the likelihood of impact, and opportunity to meet

industry needs, from R&D investment.

Active processor and researcher involvement and collaboration in the discovery and design of projects is essential to success. A clearly articulated, sustainable and practical process for this two-way engagement must be a priority.

At the outset, processor mapping against regions, species and size, as well as articulated areas of focus, will underpin worthwhile and sustainable engagement.

Following that, this engagement process must be accessible for all, and include the promise that processor input will have influence on the AMPC's operational focus. Following initial engagement processors seek reassurance that this input will be on-going and reported back on.

A knowledge hub that provides for segmentation of this communication and engagement will complement the direct and personal outreach.

Stakeholders

There is an immediate need for mapping of influence and involvement of stakeholders in the AMPC environment, for triggers and mutual topics of interest, and prioritisation of effort and resource, allocation of responsibility and identification of where and who within AMPC needs to engage based on this understanding.

The level of engagement with stakeholders will vary according to prioritisation. For some, engagement will be at an inform level only. Others will be actively collaborated with on projects and initiatives.

Providers

There is an immediate need for mapping of areas of capacity, expertise, interest and influence amongst AMPC research providers to expedite engagement with this group, systematically prioritise connections, and actively link research to industry.

Engagement with providers will be proactive, strategically involving them and collaborating with

them . However, the empowerment sits with industry in driving the R&D agenda.

5.7 Strategic Communications

The aim of a communications strategy is to drive uptake of research and knowledge amongst industry, and improve the engagement regarding future innovation priorities and outcomes.

Objectives

1. To build awareness of the AMPC's model and the opportunities it affords industry
    - KPI: Leverage of AMPC survey of members to understanding/measure awareness.
2. To share new knowledge and insights
    - KPI: Number and regularity of communications outputs.
3. To demonstrate value for the investment to end-users
    - KPI: Level of spending on innovation and R&D projects, including external leveraged funds

Principles

Five key principles underpin communications:

- **Credible and consistent** – based on evidence.
- **Accessible and proactive** – available for all.
- **Transparent and clear** – open to scrutiny.
- **Collaborative and co-ordinated** – underpinned by co-design.
- **Audience-focused** – designed to serve the purpose of industry.

	Who is involved			
Stages of communications	*Corporate*	*Member*	*Provider*	*Stakeholder*
Stage 1: Build awareness • A clear value proposition that reflects the needs of processors • A narrative that is clear, consistent and cohesive, and provide a foundation for all subsequent communication. • An established and understood engagement process	✓	✓	✓	✓
Stage 2: Share knowledge • Knowledge hub • A resourced and coordinated communications plan • A fully functioning and systematic engagement process	✓	✓	✓	✓
Stage 3: Drive uptake • Engagement, Education, Experts	✓	✓		

Audiences	Segments
Primary	• Processors (segmented as appropriate)
Secondary	• Research partners (domestic and international) • Industry R&D managers (AMPC, MLA) • Industry representative bodies (AMIC) • Government (Federal, State, Local)
Tertiary	• Broader industry

6.0 DISCUSSION

The author should include a full interpretation of the results.

Risks

There are a number of risks applying an open model as described. The table identifies key risks and their mitigation.

Risk	How to address/mitigate
The groundwork isn't done The approach to creating processes aren't properly planned	• A plan for "foundation" work is set out on the following page identifying where external and internal activities are likely to be required.
Ineffective collaboration There is a lack of leadership in driving and guiding collaboration across functions, and the collaborative processes are not supported by suitable systems	• There needs to be incentive and support to foster collaboration between AMPC function leaders. • It is likely to require supervision and formality in reporting/performance measurement systems. • In the early stages, this may require facilitation to enable teams to become accustomed to the process and working with each other towards AMPC, customer/stakeholder and functional objectives.
Remain spread too thinly Failure to prioritise and streamline investments resulting in continued 'stretch' and resulting lack of impact.	• A priority-setting process that incorporates needs and capability gaps.
Poor co-ordination Engagement with external parties is done out of step with other functions	• Collaboration and consultation referencing an accurate and robust CRM system can help avoid this risk
SMEs continue to be overlooked The divergent requirements of larger processors mean the needs of the SMEs are left out in priority setting. They present a significant risk to the sector if not serviced in an appropriately to suit their needs.	• Prioritise programs to provide extension support to SMEs based on key risks • Consider and confirm approach to SME involvement and engagement, and commit to that across the organisation.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

The main conclusions from this study are as follows:

1. The futures innovation needs of industry outlined in this paper reflect a **wide view of innovation drivers and demands**.
2. The preferred model should be applied **without need for additional corporate or organisation structures**, and can be applied to the proposed new functional structures within AMPC.
3. Successful implementation of this model will require **considerable collaboration across those functional areas within AMPC**. This includes significant foundation work to underpin AMPC's as well as in specific applications across focus areas or themes of innovation demands/solutions.
4. Successful implementation of this model to improve innovation outcomes will also require a structured and **strategic approach to engagement** with members and processors, respecting an appropriate segmentation of needs.

7.2 Recommendations

Based on the work undertaken in this project, we recommend:

1. In view of the industry environment and the nature and sources of investment funding for innovation projects and capability-building, an Open Network Model of innovation management as outlined in this paper **should be implemented forthwith** by AMPC to improve the effectiveness of managing the innovation demands of red meat processors.
2. AMPC management should **lead, foster and support effective collaboration** across functions as outlined and exampled in this paper.
3. A **robust segmentation of processors** that takes account of different needs influenced by size, location, market exposure, and innovation culture should be undertaken to drive the prioritization of resources.
4. A **strategic engagement and communication plan** should be developed for ongoing use in understanding needs, managing innovation projects and communicating outcomes.
5. AMPC should **evaluate a business case for the development of an online knowledge hub** to underpin the effectiveness of its services to industry, and address a major gap in the ability to **capture and provide ready access to insights and learnings** from current and future investments.
6. That business-case assessment should investigate broad technical platform options, extent of application and scope for integration with other customer-service tools required to proactively service processor and membership customers, as well as to improve collaboration with suppliers and stakeholders.
7. AMPC should review priority-setting processes –blending "top-down and bottom-up" approaches - for future investments and co-investments in view of its new organizational functions.

8.0 BIBLIOGRAPHY

This report references a project report delivered prior to the commencement of this project.

Toohey, E; Baker, Dr D; Rice, Dr J; Hopkins, Dr D. (2015). ***A Feasibility Study and Provisional Business Case to assess the scope and potential for establishing and operating a world class Red Meat Processing Innovation Centre of Excellence in Australia.*** Sydney: AMPC.