AMPC
AUSTRALIAN MEAT PROCESSOR CORPORATION

JBS Strategic Innovation Management Program

Contents

1.0 Executive Summary

Innovation has perhaps never been more important to both public and private sector organisations than it is today. The complexity of modern-day challenges - such as those associated with climate change and pandemics - requires new ways of thinking; consumers demand products that meet their ever-changing whims delivered how and when they want; and the pace and scale of change requires organisations to adopt new technology and apply new processes on an almost continuous basis.

Perhaps not surprisingly, **this environment requires new ways of thinking about innovation itself**. Old practices founded on research and development (R&D) activities undertaken by segregated project teams are no longer sufficient to meet the breadth of challenges organisations are now facing. More recent methods such as crowdsourcing, hackathons and design thinking marathons also do not meet requirements as stand-alone activities.

Organisations must adopt strategic, holistic and integrated approaches to innovation that align to clear organisational priorities and reach into every corner of their business, maximising ideation opportunities and potential innovation benefits.

Strategic innovation management is such an approach, shifting the focus from singular events and projects to creation of longer-term innovation mechanisms and capabilities.

This project set out to explore the concept of strategic innovation management and how it might apply to the red meat industry, taking a deep-dive into current and emerging trends and evaluating existing innovation mechanisms.

Project objectives included:

- Identification of best practice approaches to innovation;
- Understanding of the requirements of an effective innovation management system;
- Development of an effective and sustainable innovation management model for JBS Australia; and
- Establishment of a sustainable idea management process.

The **project methodology** engaged was based around three anticipated aspects of strategic innovation management – strategy, capability and pipeline.

A number of **outcomes** emerged from this project relating to:

- A systems approach to innovation
- Innovation strategy
- Governance
- Innovation management software
- Capability
- Innovation audit
- Benchmarking and best practice

The **overarching finding** of this project has been the imperative need for organisations to actively invest in new approaches to innovation – beyond R&D projects and hackathons – and the need for a strategic, systems-based approach to activities, supported by governance and capable team members.

Specific conclusions/ recommendations arising from the project focus on:

- The need for a new approach to innovation to meet the ever changing and complex demands of the modern business environment.
- The importance of strategy to ensure consideration of the context in which organisations operate and to highlight the problems/ opportunities that innovation efforts should focus on.
- The need for an effective governance system to guide innovation activities, ensuring alignment with business goals and the innovation strategy.
- The potential usefulness of innovation software, but the need to find a solution that effectively manages both capture of ideas and monitoring of projects.
- The need to consider developing capability of team members beyond those officers immediately involved in innovation initiatives.
- Opportunities for AMPC to support processors to shift to a more strategic and sustainable model of innovation.

Finally, the report suggests the potential for a new approach to broader industry development – from one based on the principle that <u>successful innovation *projects* will lead to an innovative industry</u> to one based on a principle that <u>innovative *organisations* will lead to an innovative industry</u>.

2.0 Introduction

JBS Background

JBS Australia has a proud history of innovation, particularly in the red meat sector. This is evidenced by decades-long funding for innovation projects by AMPC and MLA and adoption of many industry changing technologies (e.g. chill sprayers and Dexa in lamb).

Traditional approaches to innovation, including within JBS and the Australian agricultural sector more broadly, have focused primarily on R&D initiatives or projects. Whilst effective at delivering specific outcomes, this approach has limited innovation activity to the people directly involved in project delivery and typically led to innovation ending when the project ended.

In more recent years, there has been a subtle shift in the nature of innovation activities pursued by JBS, in partnership with AMPC and MLA. This shift has incorporated the appointment of dedicated Innovation Managers targeting identified portfolios (e.g. sustainability, people and culture) – resulting in innovation activities and energy beyond individual projects.

More recently (2019), the development of a Co-Innovation Strategy for JBS Australia provided some strategic guidance for activities by highlighting focus areas for R&D activities that align to the organisation's "buy make sell" process.

Today, there are many strengths associated with JBS Australia's approach to innovation – but there are also many opportunities for improvement. Participation is still primarily limited to those involved in innovation projects and collaboration between business units occurs on a largely ad hoc basis.

Need for Change

Conventional approaches to innovation have been based on targeted R&D activities with benefits dependent on dissemination of information to stakeholders and assumed adoption. This approach is reflected in the appointment of "Innovation Managers" in JBS and the broader red meat industry who typically lead projects relevant to their area of technical expertise.

This model of innovation is based on a world where organisations sought competitive advantage through low-cost structures, economies of scale, and/ or brand recognition. However, in an increasingly global, digitized and virtual world with reimagined supply chains and an accelerating pace of change, competitive advantage alone may no longer be enough. All organisations, regardless of industry, are under increasing pressure to innovate to remain competitive and relevant into the future.

In response, organisations have adopted a variety of innovation approaches in recent years, including innovation hubs, crowd sourcing and hackathons. However, like conventional R&D, these initiatives have typically been project-based and engagement is dependent on, and only lasts as long as, the project itself.

For organisations to benefit from ongoing innovation, there is a need to find approaches that are more holistic, systemic and sustainable over time, and that change the focus from singular events and projects to building longer-term innovation capabilities.

Prior to commencement of this project, JBS Australia had undertaken research to understand current innovation theory and innovation management practices. A key output of this activity was the development of the JBS Australia Innovation Framework.

This Framework proposed four core components needed for an effective innovation management system, including:

- **Strategy**: Innovation initiatives based on business drivers in the context of constantly changing external trends.
- **Capability**: Providing a foundation for innovation, including clarity of governance, appropriate resourcing, culture, skills and processes.
- **Pipeline**: A mechanism through which ideas can be captured in response to organisational priorities, prioritised, progressed and communicated.
- **Governance and Integration**: Approaches to resourcing and decision making to underpin innovation processes.
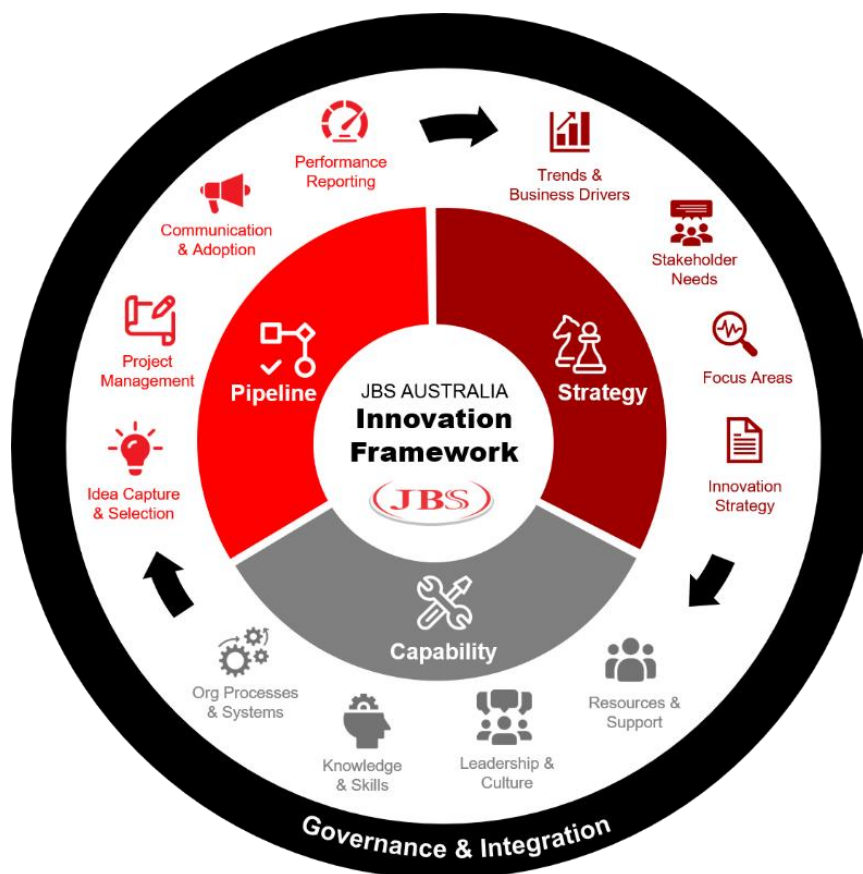
This Framework, shown diagrammatically above, formed the basis of activities designed as part of this project.

Project Purpose

This project seeks to introduce a new approach to innovation in JBS Australia – shifting from a project-driven culture to development of a systemic and strategic approach that identifies and embeds sustainable innovation capabilities and practices.

3.0 Project Objectives

The overarching objective of this project is to identify and commence implementation of an effective and sustainable approach to innovation management in JBS Australia that assists the organisation to remain competitive within current and projected operating environments. More specific objectives can be grouped against the following areas:

1. Identification of best practice approaches to innovation, including:
   a. Best practices in innovation management more generally
   b. Current approaches within the Australian red meat industry and their relative effectiveness.
2. Understanding of the requirements of an effective innovation management system based on the three components of the JBS Australia Innovation Management Framework:
   a. Strategy
   b. Capability
   c. Pipeline
3. Development of an effective and sustainable innovation management model for JBS Australia, including:
   a. A futures-based, strategic approach to innovation
   b. Understanding of capability requirements and key gaps, including governance and resourcing.
4. Establishment of a sustainable idea management process.

4.0 Methodology

The methodology engaged for the project incorporated three key phases, as represented in the diagram below:
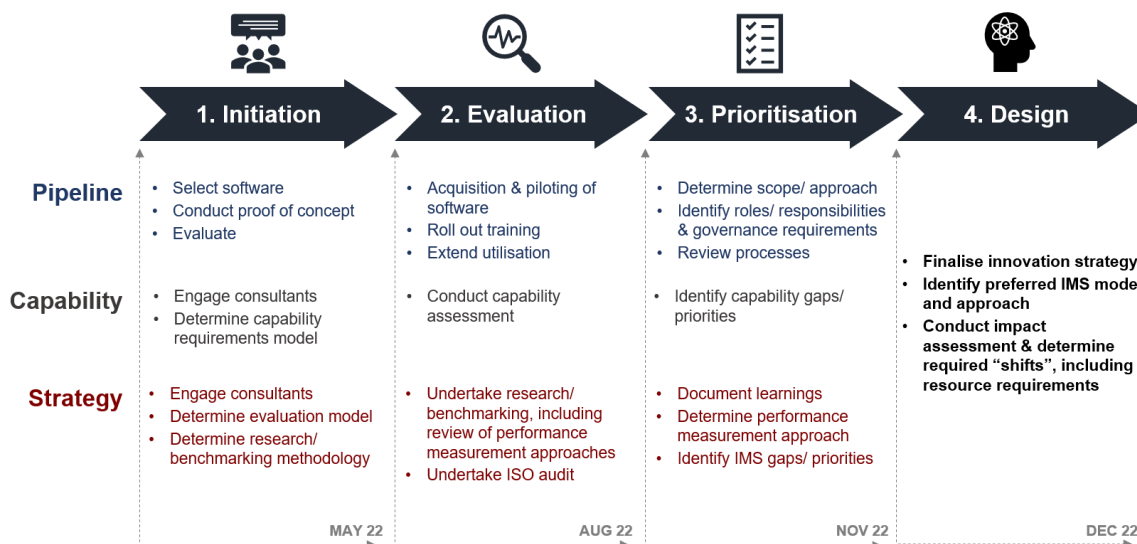
1. **Initiation**: This phase sought to provide a comprehensive understanding of current and recommended innovation management practices and their relative effectiveness; understanding of required innovation capabilities; and a working knowledge of innovation pipeline capabilities and options.
2. **Evaluation**: The evaluation phase sought to identify of required capabilities.
3. **Design**: The design phase sought to focus on development of an innovation strategy and management model for JBS Australia based on Phases 1 and 2.

5.0 Project Outcomes

The overarching finding of this project has been the imperative need for organisations to actively invest in new approaches to innovation – beyond R&D projects and hackathons.

Organisations must invest in a strategic, systems approach to innovation management – one that treats innovation as a required business discipline, much like quality assurance and project management – focusing on the core areas of strategy, governance and capability.

Organisations must invest in innovation to remain competitive yet must also be selective in their activities for innovation to be financially viable. This selection is dependent on clear priorities defined by senior management to focus innovation efforts. Ideation processes and governance mechanisms must align with these strategic priorities to ensure innovation projects that are funded are those likely to return the greatest value to the organisation.

Finally, for an organisation to be innovative, it must invest in the culture and capability of its people – beyond the roles of innovation managers. The greatest ideas are likely to come from the people doing the work – but to turn these ideas into reality requires opportunity, collaboration, critical thinking, business modelling and persuasion, amongst other skills. It also requires funding, resourcing and strategic oversight – all critical elements of a strategic approach to innovation management.

Additional specific outcomes arising from this project are summarised below, with more detailed discussion in the following section.

- **A systems approach:** Research conducted as part of this project highlights the need for organisations to shift to a systems-based approach to innovation, such as the model outlined in international standard on innovation management. Prior to the commencement of this project, JBS had developed a draft Innovation Management Framework to guide thinking (see 1.0 Introduction). Learnings and insights obtained as part of this project, including participation in ISO 56002 training, have led to the development of a more mature approach to innovation management that incorporates strategic components such as priorities and positioning, as well as internal requirements. The revised framework is included at Appendix A.
- **Innovation strategy:** A key finding of this project was the importance of strategy in developing a sustainable and integrated approach to innovation. Without a clear strategy, innovation efforts are likely to be misaligned and potentially in conflict. An effective innovation strategy articulates how the organisation wants to be positioned in relation to internal and external innovation opportunities, identifies priorities for innovation efforts and clarifies roles and responsibilities.
- **Governance:** Project research, discussions and activities have emphasised the importance of developing agile governance mechanisms to support effective innovation outcomes. Roles and responsibilities, delegations/ decision making and investment processes are just some governance aspects that are critical to ensure innovation activities target the right opportunities at the right time. Without these mechanisms, innovation efforts may be disconnected from strategy and potentially compete against each other.
- **Innovation management software:** As part of this project, JBS trialled the use of Brightidea innovation management software to collate ideas, facilitate evaluation processes and capture innovation projects. This

trial revealed that innovation management software can be a useful tool to gather and evaluate ideas but has limitations. The challenge for organisations is to adopt a technology platform that both facilitates effective capture of ideas and monitoring of innovation projects.

- **Capability:** Traditional innovation management training has focused on skills required to generate ideas and manage selected ideas through a project management process. However, for an organisation to be innovative, these skills, typically limited to dedicated innovation managers, are insufficient. Consideration also needs to be given to the breadth of attributes and capabilities needed at all levels of the organisation and across all activities. As part of this project, an overview of capabilities required to support an innovative organisation was developed. This is included at Appendix B.

- **Current situation analysis:** As part of this project, an audit of current approaches to innovation in JBS Australia was conducted based on the ISO 56002 – Innovation Management System. This activity led to an understanding of current strengths and opportunities for improvement in relation to effective innovation management, providing value information about priorities moving forward. The final report from this audit is included at Appendix C.

- **Benchmarking and best practice:** Research undertaken as part of this project identified a range of best practices and insights in relation to innovation management. These are detailed in the next section and in Appendix D – Best Practices in Innovation Management.

6.0 Discussion

6.1 A systems approach

There is growing acknowledge across all industries globally that innovation is critical for organisations to be able adapt to continuous change and emerging technologies; address complex problems emerging from challenges such as the pandemic, climate change and geopolitics; and to remain competitive generally.

However, research shows there is a significant disconnect between the importance of innovation and confidence in the ability of organisations to be innovative.

As outlined in The Routledge Companion to Innovation Management, "organisations are generally underestimating what it takes to make their innovation efforts successful, especially when they are seeking more radical, disruptive or transformative innovations. Innovation attempts tend to be fragmented, ad hoc and episodic. There is thus a need to find approaches that are more holistic, systematic and sustainable over time, and that changes the focus from singular events and projects to building longer-term innovation capabilities".

These concerns have led to an increasing focus on innovation management frameworks that seek to outline a systems approach to innovation, describing the different elements or factors that should be considered by any organisation seeking to boost its capability to innovate.

ISO 56002

The international standard ISO 96000 is one such innovation management framework. The standard describes the fundamental concepts and principles of innovation management and its systemic implementation. Developed at a global level, the standard has been adopted by numerous countries, including Australia
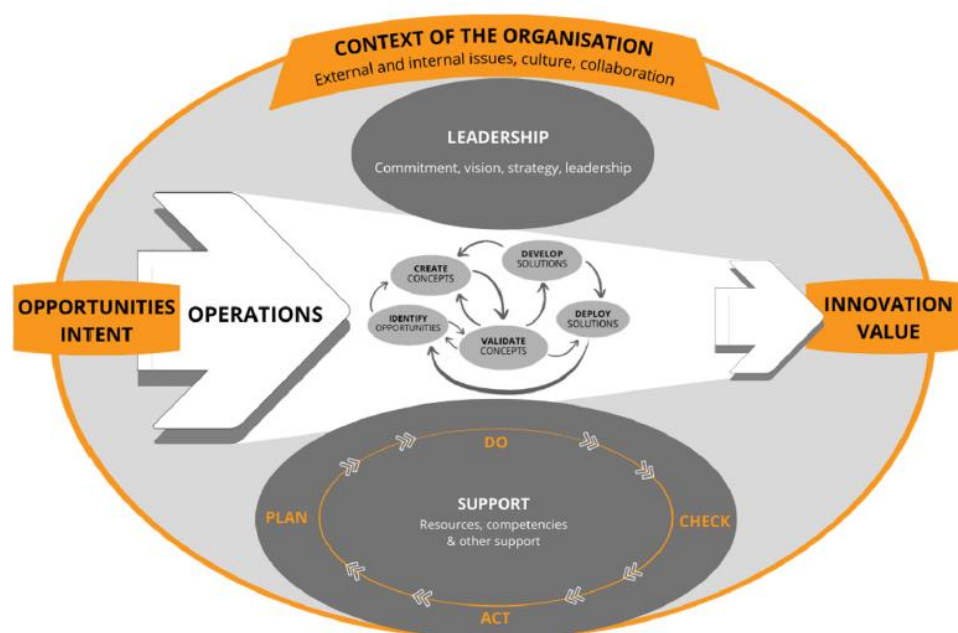
As part of this project, representatives from JBS attended training on the ISO 56002 standard, conducted by Impact Innovation.

JBS Innovation Framework

Prior to the commencement of this project, JBS had developed a draft Innovation Management Framework to guide thinking (see 1.0 Introduction). Learnings and insights obtained as part of this project have led to the development of a more mature approach to innovation management that incorporates more detailed strategic components such as priorities and positioning, as well as internal requirements (see Appendix A).

6.2   Innovation strategy

A key finding of this project was the importance of strategy in developing a sustainable and integrated approach to innovation. Without a clear strategy, innovation efforts are likely to be misaligned and potentially in conflict. An effective innovation strategy articulates how the organisation wants to be positioned in relation to internal and external innovation opportunities, identifies priorities for innovation efforts and clarifies roles and responsibilities.
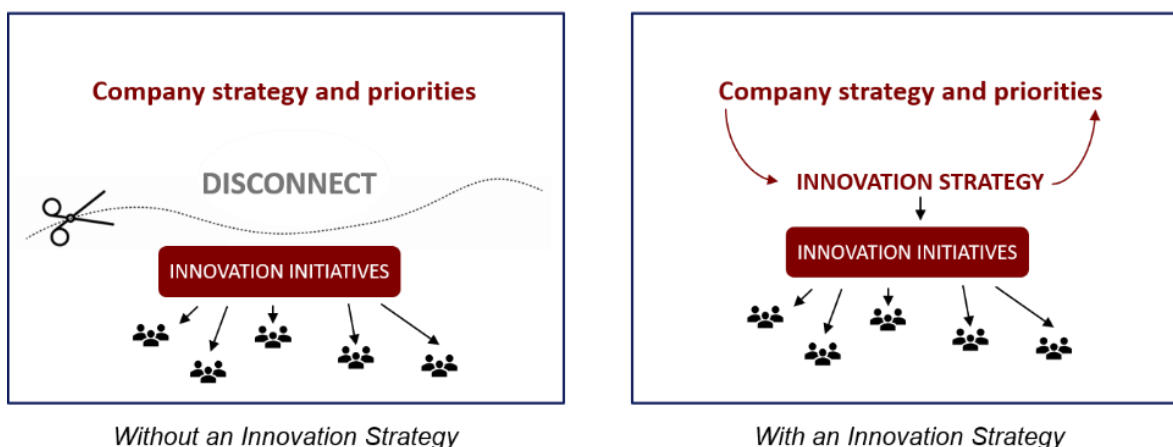
Innovation strategies should not be generic, but rather should be designed to reflect the unique context, challenges and opportunities for individual organisations. However, the following should be considered as part of the development of an innovation strategy:

- **Context and trends**: This refers to an understanding of the environment in which an organisation operates, including identification of emerging trends and technologies that may impact on operations.
- **Challenges and opportunities**: Includes identification of key organisational challenges and potential innovation or improvement opportunities.
- **Positioning**: Includes consideration of the nature of innovation the organisation should pursue (e.g. incremental, adaptive, disruptive) as well as consideration of how innovation efforts should be

focused across horizons (short, medium, long term). Positioning can also include degree of effort and internal/ external focus.

- **Priorities**: This refers to the identification of priorities for innovation efforts, based on the items above. Determination of priorities can also include identification of innovation activities that the organisation will not pursue.

- **Portfolios**: Portfolios refers to grouping of planned innovation efforts. Groups can be sorted in a number of ways, including horizons and subject matter (e.g. people, sustainability). Organising innovation efforts in portfolios assists in alignment with business goals, targeted resource allocation and communication and collaboration activities.

- **Innovation Management**: An innovation strategy should also consider how an organisation plans to improve its approach to innovation activities, ideally by assessing current performance against an innovation framework, enabling opportunities to be addressed.

- **Funding**: Finally, an innovation strategy should articulate the organisation's approach to funding of innovation initiatives, including innovation management activities. This can include identification of strategies such as pursuit of tax incentives, the planned source of funds (e.g. external/ internal) and how funds are to be allocated across portfolios and/ or horizons.

As a result of research undertaken through this project, JBS has resisted the lure to "produce" an innovation strategy (initially planned for end of 2022), instead choosing to first engage senior leadership in discussions around strategic priorities and preferred governance practices. Whilst this has caused delays to the production of an innovation strategy, ultimately, an Innovation Strategy is a document that communicates an organisation's approach to innovation. To develop an effective and sustainable approach requires engagement of the right people in content development. Circumventing this process risks creation of a document that is misaligned and lacks vital strategic support.

6.3 Governance

Project research, discussions and activities have emphasised the importance of developing agile governance mechanisms to support effective innovation outcomes.

Roles and responsibilities, delegations/ decision making and investment processes are just some governance aspects that are critical to ensure innovation activities target the right opportunities at the right time. Without these mechanisms, innovation efforts may be disconnected from strategy and potentially compete against each other.

An innovation governance model describes how the management team of a particular company has chosen to allocate responsibilities for innovation – overall or for part of it – within the organization. The mission to promote and oversee innovation can be officially entrusted to a particular person – who may or may not be fully dedicated to that task – but it can also be assigned to a group of managers working together within different types of organizational mechanisms.

Strategic governance mechanisms

The primary function of strategic governance mechanisms is to facilitate alignment of innovation efforts with strategic priorities based on current business context.

The introduction of strategic governance mechanisms that facilitate whole-of-organisation transparency and decision-making has been identified as an important strategy for JBS Australia in realising a strategic and sustainable approach to innovation management.
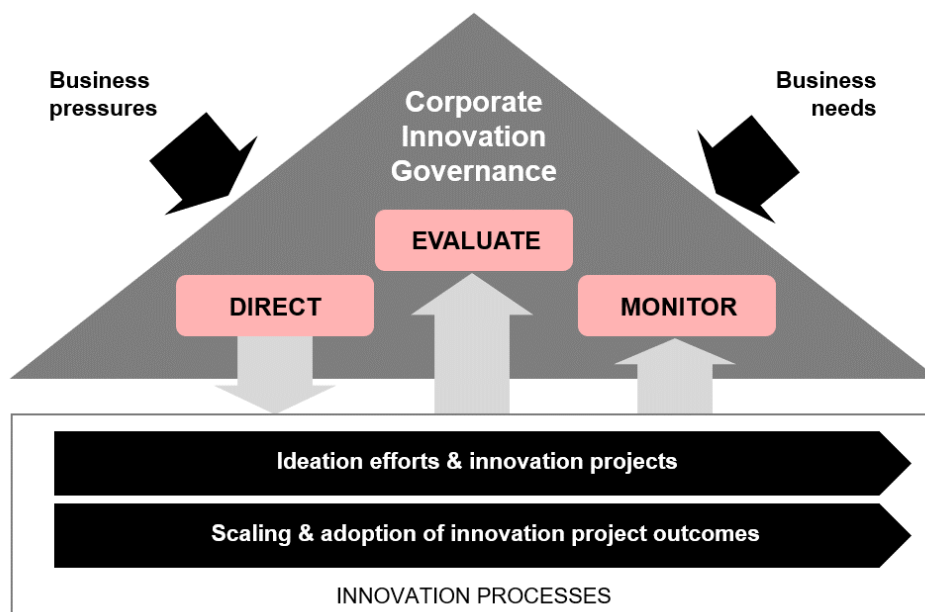

The model above, adapted from ISO 38500 - Corporate Governance of Information Technology, highlights the recommended focus of whole-of organisation innovation governance mechanisms – **Direct**, **Evaluate** and **Monitor**.

Jean-Philippe Deschamps, in Imperatives for an Effective Innovation Governance System, outlines eight success factors for effective innovation governance. They include:

1.   The level of commitment and engagement of the top management team – particularly the CEO – behind the chosen model.
2.   The breadth and depth in the scope or coverage of the implemented model, in terms of process and content, as well as hard and soft issues.
3.   The relative independence of the model with regard to the unique personality and skills of a single individual, i.e. its robustness vis-à-visa change of actors.
4.   The ability of the model and its key actors to gather broad and proactive support from the rest of the organization.
5.   The inclusion of adequate checks and balances in the model, as well as processes and tools for continuous performance evaluation and improvement.

6. The robustness of the model vis-à-vis external pressures and crises, in terms of allowing the company to 'stay the course' and meet its long-term innovation performance objectives.
7. The capacity of the model to evolve, enlarge its scope and grow with the company, particularly when operations and market coverage are being globalized.
8. The clarity and accessibility of the governance model for the board of directors, for information and auditing purposes.

Based on this and other research (including the Corporate Innovation Governance model on the previous page and additional organisational discussions), as part of this project consideration was given to the greatest opportunities for governance interventions in the current environment in JBS Australia. The diagram below provides a summary of the findings from this activity. Consideration of this model, including allocation of responsible authorities is ongoing.
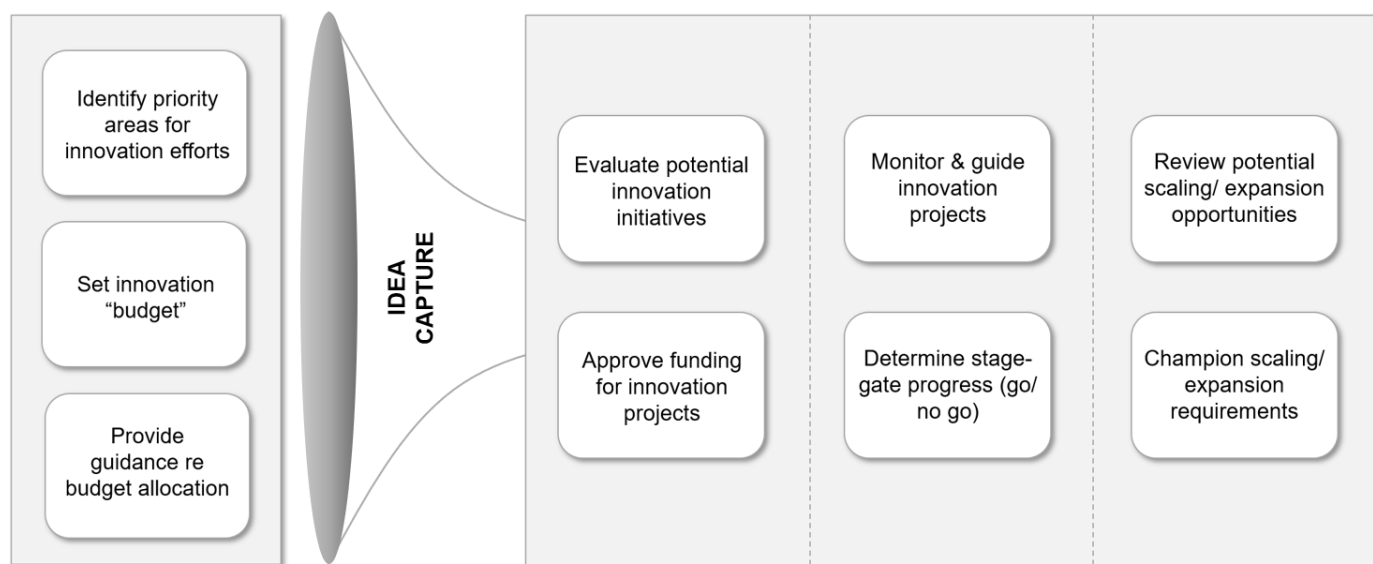
6.4 Assessment of innovation management software

Idea management software is commonly used by organisations to assist with capture, prioritisation and progression of innovation suggestions from employees or external sources.

As part of this project, funding was allocated for the trial of innovation management software in JBS Australia. Qmarkets and Brightidea, both in the top five performers by various research companies in 2021, were investigated for potential use, with Bright Idea selected, due to ease of use, simple pricing model and availability of Brisbane-based support.

Qmarkets offer a range of enterprise innovation software across the innovation ecosystem, including Q-trend, Q-scout, Q-ideate, Q-optimise and Q-impact.

These products are designed to tackle a variety of strategic business challenges, including employee innovation, continuous improvement, technology scouting, business transformation and open innovation.

BRIGHTIDEA

Brightidea seek to accelerate innovation by empowering those behind it with advanced software to facilitate and streamline the ideation process – and the collaboration it thrives on.

Brightidea products include Whiteboard to brainstorm ideas; Idea Box to capture, manage and track ideas; Programs to support innovation activities such as hackathons; Labs to nurture riskier ideas; and Ecosystem to connect to outside resources and support activities such as scouting and venture funding.

Bright Idea pilot

As part of this project, JBS Australia adopted Bright Idea for a 12 months period to pilot the use of innovation management software. Total costs for the 12 months subscription totalled $46,000.

At the outset of the pilot, it was particularly hoped that Bright Idea could be utilised as a "register" of past, current and new innovation projects, such as those externally funded through AMPC.

During the pilot, Bright Idea was used in a number of ways, including:

- Collection of improvement ideas in response to training/ workshops
- Facilitation of a selection process to name a new organisation-wide app
- Collection of employee-identified improvements within specific teams
- To capture and monitor JBS Australia innovation projects.

The table below provides a summary of strengths and limitations encountered during the pilot.

Strengths	Limitations
- Clear templated "play sheets"/ guidelines to assist with development of campaigns - Customisable score sheets to evaluate ideas - Ability to automate emails and work flows	- Limited capability as a project management tool - Not easy to include or highlight accompanying documentation - Inability to modify "team" space (e.g. budget information) - Difficulties modifying dashboard content - Limited to JBS team members with JBS email – significant costs to allow more than 1000 "external" clients to access the platform (external client = emails other than JBS emails)

Whilst Bright Idea was found to be an effective tool for capturing and evaluating ideas, limited capability to engage operational team members and limited project management functions led to the conclusion that it was not a valuable use of funds at that point in time.

The decision to not continue with Bright Idea in no way diminishes the importance of a clearly articulated innovation pipeline – a mechanism to capture ideas from target groups that address identified priorities. JBS continues to pursue a consistent approach to idea management through processes and governance mechanisms. JBS will also pursue investigation of suitable technology platforms that meet both needs of capturing ideas and monitoring projects.

Research findings

Hackathons, think tanks, challenges and innovation hubs are common tactics engaged by organisations wanting to become more innovative based on the assumption that involving employees will lead to a more innovative organisation. Most innovation software has been designed to support these types of events, providing a mechanism to capture and evaluate ideas.

Innovation software makes it easy for organizations to run ideation campaigns on a continuous basis with an unlimited number of participants. People can post their ideas or vote and comment on the ideas of others. Innovation teams use the system to manage and track idea campaigns, analyse the incoming idea portfolio and to prioritize the most promising ideas for development and funding.

Whilst there are significant benefits to be obtained from implementing ideation software, there are a number of considerations when determining whether to acquire the software, including:

- **Not a quick fix:** Implementing ideation software will not automatically make an organisation innovative. Certain cultural characteristics need to be present for implementation to be effective. For example, employees need to feel that their ideas will receive meaningful consideration and will not be criticised by other team members.
- **Importance of follow-up:** Effective implementation of ideation software requires dedicated resources to ensure submissions are considered and reviewed and that meaningful feedback can be provided to the submitter. Without an effective feedback process, an initial uptake in ideation through software may quickly become stagnant due to increasing team member cynicism. As a result, if not carefully managed, implementation of innovation software can potentially cause more harm than good.
- **Expectation management:** Innovation software can be used to gather ideas related to a particular topic and/ or used for open subject innovation. Research shows that with open subject innovation, many companies receive ideas that are not related to innovation – for example, ideas like reducing working hours, building a gym near the offices etc. Even without open subject innovation, ideas related to a particular topic may not be well thought-through or clear.
- **Funding/ resourcing:** There is no point collecting ideas if there are not funds and resources available to implement them. As such, clear processes for selecting and funding/ resourcing ideas must be in place prior to implementation of innovation software.

- **Think beyond ideation:** Most innovation software focuses on the capture and review of ideas, with some inbuilt mechanisms to monitor the progress of selected ideas. However, innovation software does not necessarily lend itself to effective project management and monitoring.

6.5 Capability

Traditional innovation management training has focused on skills required to generate ideas and manage selected ideas through a project management process. However, for an organisation to be innovative, these skills, typically limited to dedicated innovation managers, are insufficient. Consideration also needs to be given to the breadth of attributes and capabilities needed at all levels of the organisation and across all activities.

This project incorporated identification of people capabilities required across the organisation to support a sustainable approach to innovation.

These capabilities include those required by organisational leaders with regards to innovation, such as sponsorship and systems thinking; skills required by officers involved directly in innovation, such as project management and evaluation; and the skills required by team members across the organisation to be able to effectively contribute to innovation, including digital and data literacy, creative thinking and business analysis.

A summary of identified capabilities is included at Appendix B – Innovation Management Capabilities (People).

6.6 Current situation analysis

This project incorporated an audit of current performance in terms of strategic innovation management to identify strengths and opportunities for improvement.

The ISO 56002 Innovation Management System standard was selected to use as the basis of this audit for its strong foundations in systems management. Impact Innovation were engaged to conduct the audit, using their online Innovation Navigator tool.

The audit incorporated workshops with three business units within JBS (Northern, Southern and Primo) to assess current practices. Results from these workshops were then analysed and common themes across the organisation were identified.

Whilst the audit highlighted strong innovation activity occurring across the various business units, it also revealed that this activity was not aligned organisationally and that there were opportunities for more effective integration.

Key recommendations featured in the audit report include:

- Development of an organisation-wide innovation vision and strategy
- Effective communication from leadership about the strategy
- Design and support for a fit-for-purpose pipeline (or a number of pipelines) that can transverse all business units, as well as a funding model (or models) that aligns to each pipeline.

The detailed report from this audit, including recommendations is included at Appendix C – ISO Audit Results.

The Innovation Navigator tool and process facilitated by Impact Innovation was simple to follow and enabled ease of engagement of time-poor employees. However, the process was open to subjective scoring by participants, and this was reflected in the results. Feedback to Impact Innovation was that the process would benefit from an evidence-based component of the methodology to challenge scores and provide more meaningful results.

Organisations interested in utilising a self-assessment tool to inform their innovation management journey should consider the following:

- Ensure approach is based on a credible, recognised system model of innovation management
- Look for simple, technology supported approaches to assessment that are most likely to engage participants
- Utilise the assessment process as an opportunity to educate participants on the importance and components of innovation management
- Look for a methodology that incorporates evidence-based assessment to reduce subjectiveness.

6.7 Benchmarking and best practice

As part of this project, desktop research was undertaken to identify current best practices in innovation management. Research focused particularly on best practices associated with the following aspects of innovation management:

- **A systems approach**: Research shows that approaches to innovation that are based on singular activities, such as challenges, projects or R&D hubs, have limited impact in the current environment. A systems approach, one that sees innovation as an interconnected suite of activities, has been identified as the most comprehensive and effective approach to innovation.
- **Strategy:** Best practice organisations have a clear, well communicated innovation strategy that articulates the organisation's approach to both the subject of innovation and to the management of the innovation system.
- **Governance and resourcing**: Effective innovation management requires clear rules and procedures are carried out by identified roles and structures aligned to the organisational strategy.
- **Social innovation:** Innovation is increasingly being viewed as critical to address sustainability goals, including environmental and socio-economic challenges. Commercial and non-profit

organisations alike are using innovation to improve sustainability outcomes. Significant investment is being made by non-profit organisations to developing free tools and resources to support innovative practices.

- **Funding:** Funding is a key aspect of innovation whether it be external, government, and/or internally funded ambitions. Research shows organisations are considering a range of innovation funding approaches.
- **Innovation pipeline:** The most traditional aspect of the innovation system, the pipeline, refers to the process of generating, selecting, trialling and implementing innovation ideas. Best practice organisations engage design thinking approaches and utilise stage gates to monitor project progress.
- **Employee engagement:** Best practice organisations view employee engagement as a "continuous conversation" with team members, using multiple methods to continuously seek input to potential innovations.
- **Measurement:** Success and results can be difficult to measure within an innovation environment. Research shows that input indicators should be used early in an innovation program, with output indicators introduced as innovation initiatives are realised.

The Best Practices in Innovation Management report included as Appendix D provides more detailed information of research findings against each of these headings.

7.0 Conclusions/ Recommendations

The conclusions and recommendations arising from this project are summarised below.

1. **New approach to innovation needed**

   Organisations must stay across emerging technologies to remain competitive and continue delivering value to customers, partners and employees. They must also find new solutions to complex challenges and address old, inefficient ways of working.

   Traditional, project/ R&D based approaches to innovation are insufficient to meet these needs as they limit the focus of activities and the number of people involved in innovation initiatives. Approaches to innovation that focus on single or a few initiatives, such as hackathons or crowd sourcing, are also insufficient as they typically don't address the "infrastructure" required to support ongoing innovation efforts.

   Organisations must instead adopt a, systems-based approach to innovation that embeds required capabilities and core processes, enabling continuous identification and adoption of new ways of doing things.

   In acknowledgement of this need, there is a growing base of available systems-based innovation management frameworks. Common components of these frameworks include: Strategy, Pipeline/ Process, Governance & Resourcing, Capabilities & Culture, Reward & Recognition and Communication & Change Management.

   Many of these frameworks include tools to support an internal audit of current performance, providing information about strengths and opportunities for improvement that can be used to prioritise activities.

2. **Importance of strategy**

   Research conducted as part of this project has highlighted the importance of developing an innovation strategy to guide innovation and innovation management activities, with input from senior executives.

   Without an innovation strategy, innovation efforts can easily become a grab bag of perceived best practices and different parts of an organisation can wind up pursuing conflicting priorities or not sharing learnings, wasting valuable resources.

   An effective innovation strategy is based on a considered analysis of the internal and external environment, articulates how the organisation wants to be positioned in relation to internal and external innovation opportunities, identifies priorities for innovation efforts and clarifies roles and responsibilities. It also outlines a roadmap to improve organisational capabilities with regards to an innovation management system.

3. **Importance of governance**

   Another key learning from this project was the importance of a clear governance framework to guide implementation of the innovation strategy. Innovation governance can be thought of as a system of

mechanisms to align goals, allocate resources and assign decision-making authority for innovation, across the company and with external parties.

A comprehensive innovation governance system is critical to ensure innovation activities support identified priorities by focusing ideation efforts, guiding funding decisions, ensuring "failures" are ceased early, and maximising potential for scaled adoption of successes.

4. **Idea management tools**

Whilst this project saw the cessation of Bright Idea as an innovation management platform for JBS Australia, that does not mean it found there is no place for idea management tools. This project has highlighted the importance for organisations to have effective tools in place to facilitate easy capture and sharing of ideas as well as to provide transparency with regards to selected ideas and their relative progress.

Organisations need to consider both needs – the capture of ideas and the oversight of innovation projects – when looking at innovation software. Many platforms purport to provide project oversight but in actuality do not provide sufficient capacity to effectively monitor projects, resulting in likely duplication of content between systems.

JBS Australia will continue to seek a technology solution that addresses both of these requirements.

5. **Capability**

This project has identified the need to develop the capabilities of employees beyond those immediately involved in innovation projects.

To maximise potential input of ideas, organisations must investment in the development of all team members so that they:

- are aware of emerging trends and technologies
- are able to think critically and creatively
- can work collaboratively
- know how to take action to make things happen
- have the resilience to adapt to ongoing changes.

6. **New approach to industry development**

The history of innovation in the Australian agricultural sector appears to have been primarily based on the principle that <u>successful innovation *projects* will lead to an innovative industry</u>.

The learnings of this project, pointing to the limitations of a project-focused approach to innovation, suggest that perhaps there is an alternative approach to industry development that might be more effective, one that is based on the principle that <u>innovative *organisations* will lead to an innovative industry</u>.

If this new principle was to be adopted, there is opportunity for AMPC to rethink how it can support processors in adopting more strategic and systemic approaches to innovation.

7. Other opportunities for AMPC

This project has raised potential opportunities wherein AMPC could provide support to processors to become more innovation, including:

- Raise awareness of processors of the need to think of innovation beyond delivery of projects – to understand the benefits of a strategic and systemic approach to innovation management and provide frameworks to guide realisation of such approaches
- Undertake regular (continuous) scanning of emerging trends and technology that may impact the red meat industry and communicate the results on a regular basis to processors
- Delivery of "training" programs targeting dedicated innovation officers that focus on establishment of appropriate governance mechanisms and how to measure innovation effectiveness
- Delivery of "training" programs (face to face and/ or online) that develop capabilities of individuals beyond those immediately involved in innovation projects

8.0 Appendices

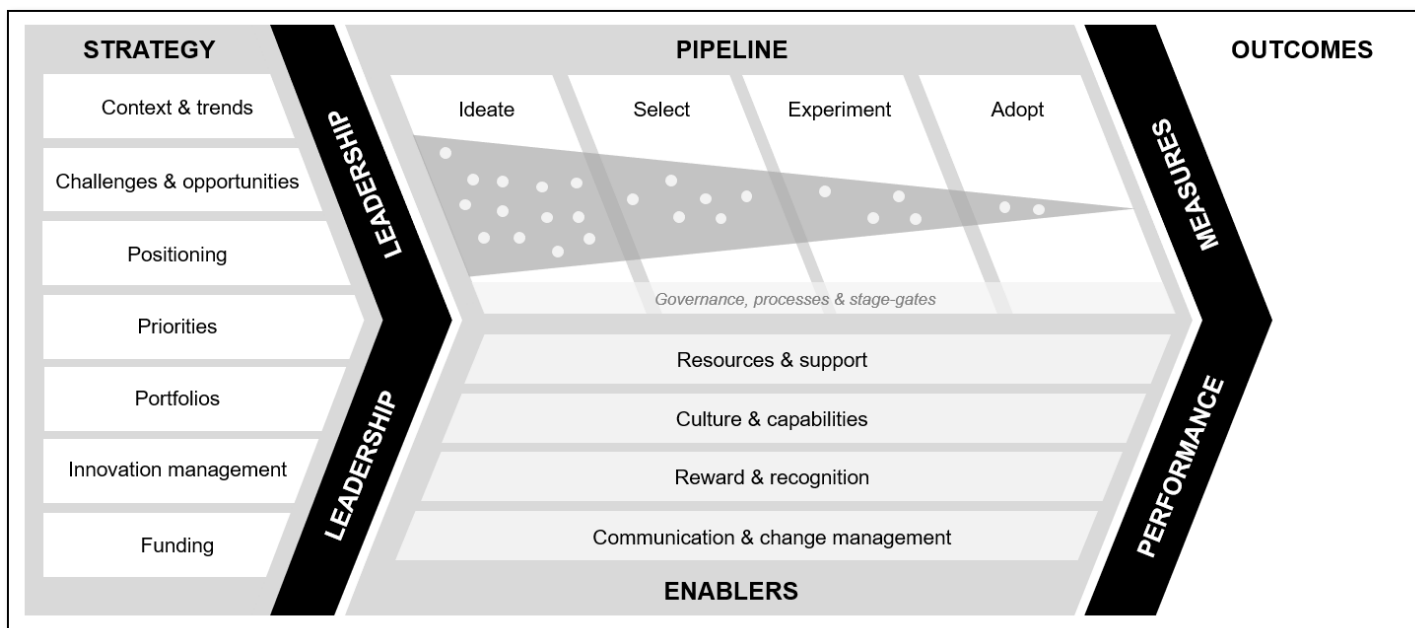The following Appendices are attached to this report:

- Appendix A – Innovation Management Framework (revised)
- Appendix B – Innovation Management Capabilities (People)
- Appendix C – ISO Audit Results
- Appendix D - Best Practices in Innovation Management

Appendix A – Innovation Management Framework (revised)

Original framework
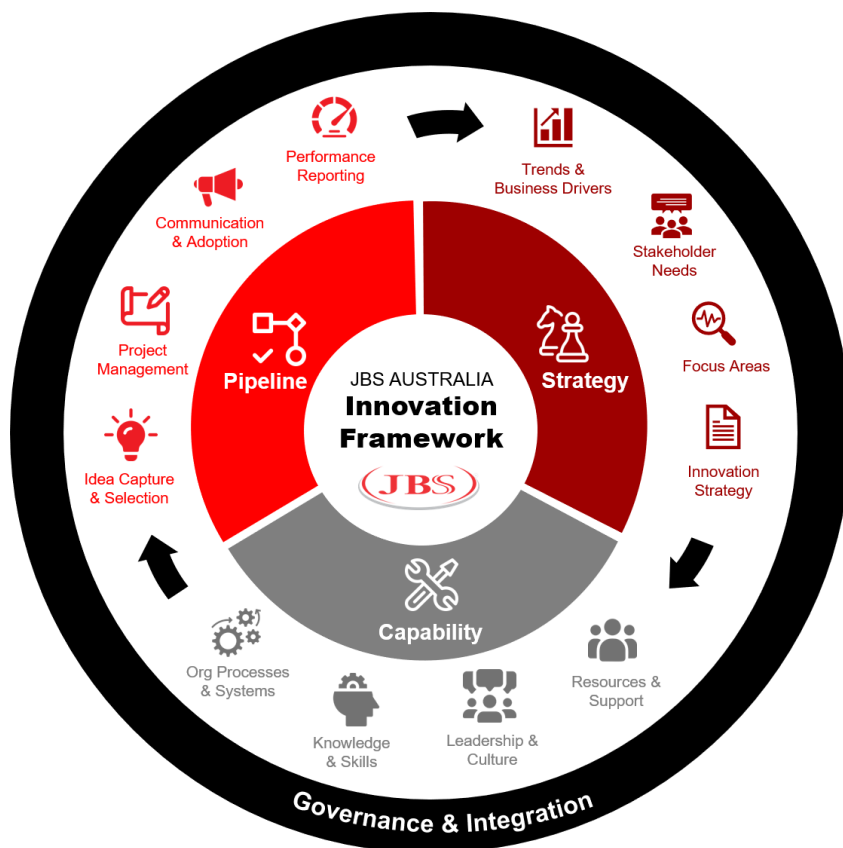
Revised framework

Appendix B – Innovation Management Capabilities (People)

Innovation Management Capabilities (People)

LEADING INNOVATION

INSIGHT	ALIGNMENT	ENGAGEMENT	ADOPTION
Trend monitoring	Strategic thinking	Sponsorship & championing	Integration
Market awareness	Systems thinking	Risk tolerance	Promotion
Customer centricity	Governance & decision making	Change management	Cross-business application
Understanding of innovation types	Project monitoring	Communication of priorities	Scaling & modifying
Product lifecycle		Motivation & inspiration	Budget allocation
			Resource allocation

DELIVERING INNOVATION

ANALYSIS	IDEATION	PROPOSAL	IMPLEMENTATION	EVALUATION
Vision/ purpose formulation	Creativity	Budget development	Creative agility (test, reflect, adjust)	Concept evaluation
Data analysis	Design thinking	Risk assessment	Project management	Benefits assessment
Problem framing	Critical thinking	Benefits identification	Speed to market	Performance measurement
Benchmarking	Problem solving	Business case development	Risk management	Reporting
Requirements analysis	Evaluation	Presentation	Stakeholder management	Scaling assessment
Stakeholder analysis	Prioritisation	Stakeholder engagement	Change management	

ENABLING INNOVATION

AWARENESS	READINESS & RESILIENCE	TEAMWORK & COLLABORATION	CREATIVITY	ACTION
Current & emerging technologies	Active learning	Knowledge management	Questioning	Initiative
Sustainability goals	Adaptability	Cross-boundary collaboration	Observing	Accountability
People challenges	Openness for change	Team player	Experimenting	Escalation
Future of work	Resilience	Networking	Challenging	Communication
Compliance requirements	Psychological safety			
Organisational priorities	Risk perception			
Digital & data literacy	Tolerance of ambiguity			

Appendix C – ISO Audit Results

Innovation Navigator Report

For JBS Australia

Prepared and delivered by Impact Innovation Group

DATE: 13/2/202313/02/2023

IMP**ACT**
INNOVAT**ION**

Appendix D – Best Practices in Innovation Management

Best Practices in Innovation Management

1. A systems approach

An increasing pressure to in recent years has seen a corresponding increase in new innovation tools and techniques. These include open innovation, idea management platforms, hackathons, design thinking labs, start-up accelerators and corporate venture funds.

However, research shows these activities can cause confusion within the workplace with many initiatives working in direct conflict with each other and not delivering desired results. This is backed up by McKinsey's consultation with CEOs, amongst other studies.

84%	**80%**	**6%**
of CEOs believe innovation is critical to growth	of business models are at risk	of CEOs are satisfied with their innovation performance

Figure 1 - mckinsey.com

In its 2021 Most Innovative Companies report, Boston Consulting Group's (BCG) noted that "CEOs are ramping up their companies' efforts and investment, recognizing that innovation's power to boost resilience and drive advantage is more important than ever". However, BCG also highlighted concerns that "their hopes will not be realized because their companies are not ready. They have yet to build the systemic ability—the underlying processes and capabilities that drive innovation—to transform ambitious aspirations into real results".

Some of the reasons for these efforts not living up to expectations include lack of necessary resources and competencies, not setting a clear direction to guide creativity, failure in providing the required organisational structures, missing appropriate measurements, insufficient `senior management commitment and the lack of providing appropriate end-to-end processes or ways of working for the innovation initiatives to succeed.

This view is also expressed in The Routledge Companion to Innovation Management, which cites "organisations are generally underestimating what it takes to make their innovation efforts successful, especially when they are seeking more radical, disruptive or transformative innovations. Innovation attempts tend to be fragmented, ad hoc and episodic. There is thus a need to find approaches that are more holistic, systematic and sustainable over time, and that changes the focus from singular events and projects to building longer-term innovation capabilities".

Innovation requires a systemic approach: one that is both top-down and bottom-up and does not seek to "tick an innovation box" or be a Senior Executive's pet hobby or a passing phase. If embraced effectively, innovation can be a powerful and practical lever, integrated across the entire public sector system.

Figure 2 - OPSI, OECD

These concerns have led to an increasing focus on innovation management frameworks that seek to outline a systems approach to innovation, describing the different elements or factors that should be considered by any organisation seeking to boost its capability to innovate.

The table below provides an overview of typical elements of a systems approach to innovation management, as outlined in the Routledge Companion to Innovation Management.

Theme	Examples of elements
Context	Scanning of the external and internal environment. Identification of trends, opportunities and challenges, technologies, user and customer needs and requirements, and stakeholders.
Direction	Vision and direction, managerial goals, objectives and strategies. Strategic and tactical planning.
Leadership	Commitment, mandate, engagement, future focus and communication. Incentives, leadership styles and values.
Culture	Work environment, social context, values and organizational culture supporting innovation activities.
Processes	Innovation processes, including insights from the context, idea generation, prioritization and selection, validation, experimentation and prototyping, business modelling, incubation, commercialization and implementation. Innovation projects, initiatives and portfolios.
Structures	Organizational setup, governance, roles and responsibilities. Internal and external linkages, networks and collaboration (customers, partners, suppliers, etc.).
Support and resources	Funding, people and time. Tools and methods, competences and skills. Intellectual property management and data analytics.
Evaluation	Innovation metrics, indicators, monitoring, assessment, evaluation, management review, feedback. Improvement of the system.

Examples of popular systems approaches to innovation management are outlined below:

- **ISO 56000 series of innovation management standards** - a family of standards published by ISO (International Organisation for Standardisation) in 2019, in collaboration with approximately 50 other countries, that is aimed at providing guidance to organisations on how to manage innovation better and benchmark their related activities and programmes.
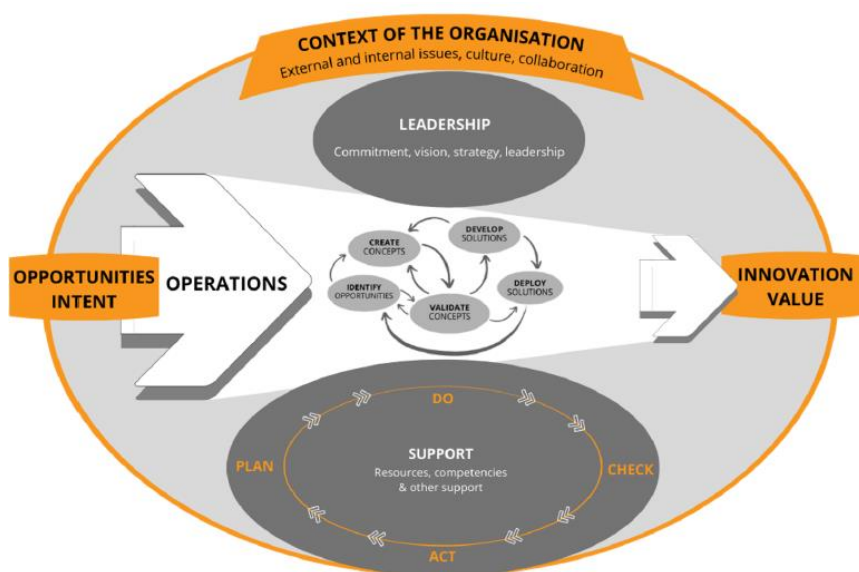
- **BCG's i2i Innovation Benchmarking Tool** – outlines ten innovation system factors essential to innovation success.

- **OPSI's Innovative Capacity Framework (see next page)** – developed by OECD's Observatory of Public Sector Innovation (OPSI), this framework was developed to support the innovative capacity of government.
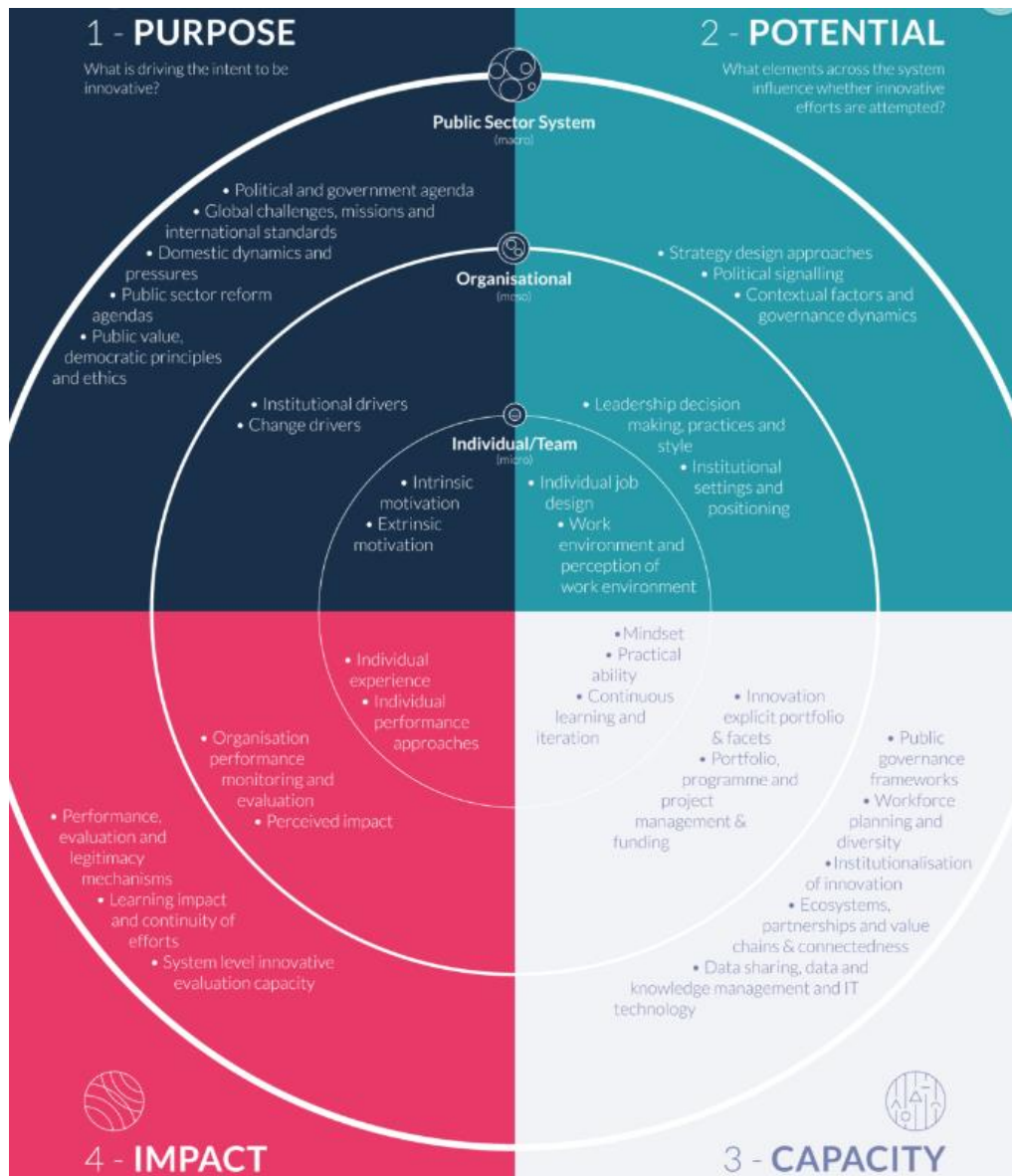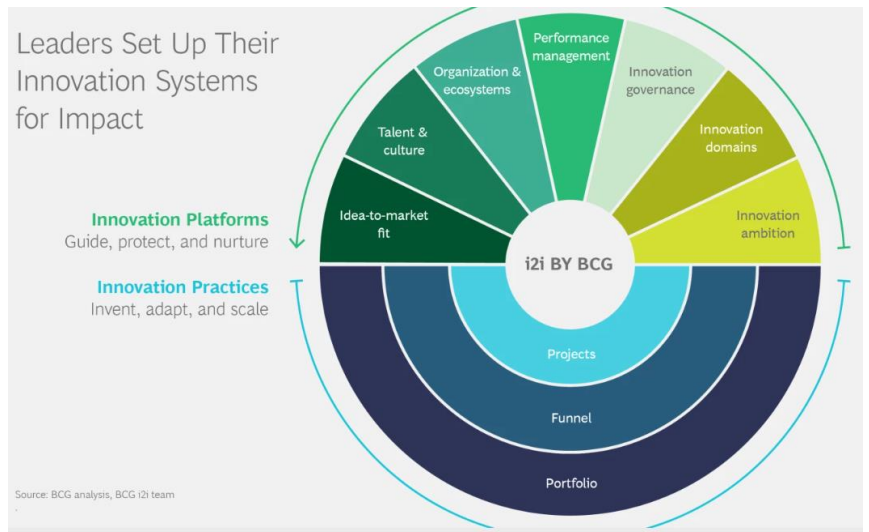
The model below by Viima shows how the different components of a leadership framework can fit together in a process sense.
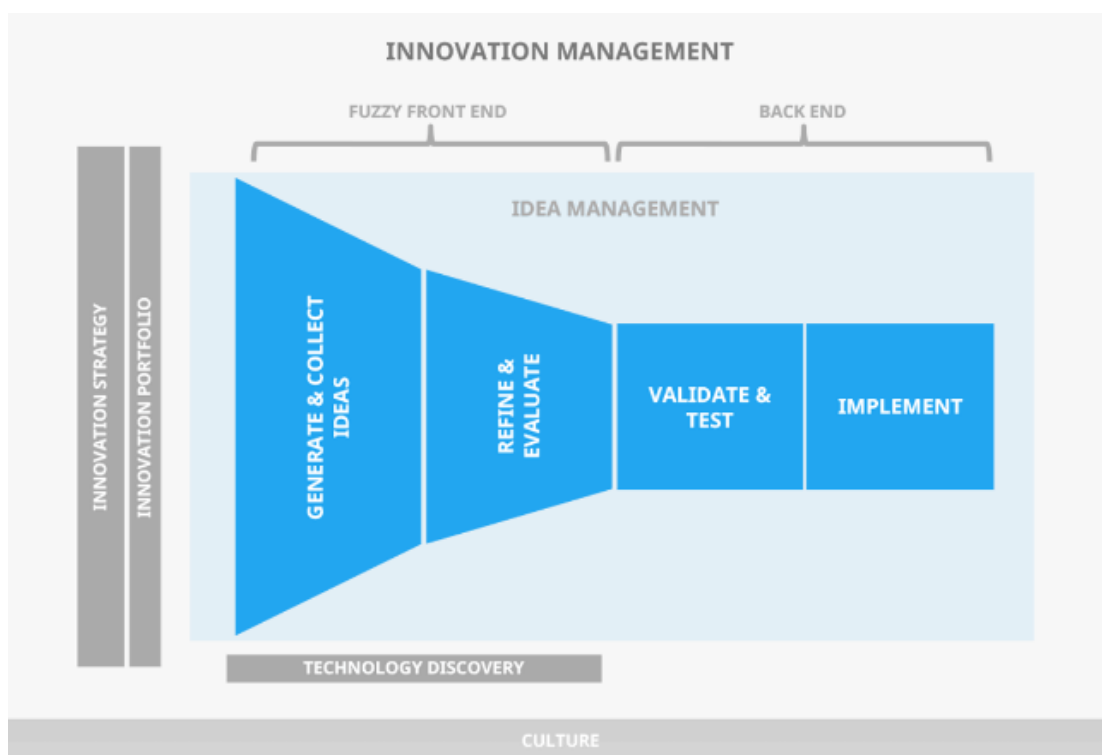
2. Innovation strategy

Almost a decade ago, Harvard Business School professor Gary Pisano famously wrote that companies should consider creating an innovation strategy. Today, an innovation strategy is not just an optional nice thing to have — it's a requirement for companies that want to be successful.
The Conversation, 2023

In their global study of 1,265 companies, The Conversation found the link between innovation strategy and corporate performance was strong, regardless of companies' age, size and location. New scientific discoveries were also more common among companies with an innovation strategy. All innovation strategy elements — leadership, resources, knowledge management and processes — were found to increase the likelihood of new discoveries. In addition to these practices, innovation strategies enhanced overall corporate performance.

A strategic approach to innovation management seeks to ensure the greatest value is realised from innovation activities by facilitating alignment at all levels with organisational priorities. It is also focused on ensuring organisations select the best approaches to innovation management, given their unique business objectives and context (arising from internal and external challenges and opportunities).

Numerous consultancies and research companies refer to the disconnect between strategy and innovation, including Strategyzer: "From our experience, nowadays most companies perform some sort of innovation activities. Unfortunately, we only rarely see a clear alignment between strategy and innovation. This results in innovation projects that inevitably fail to gain traction and support from leaders within the business."

Steve Blank, founder of the Lean Startup movement, calls this "**innovation theatre** – a bunch of innovation activities that do not produce any tangible outcomes".

Without an innovation strategy, different parts of an organisation can easily wind up pursuing conflicting priorities—even if there's a clear business strategy.
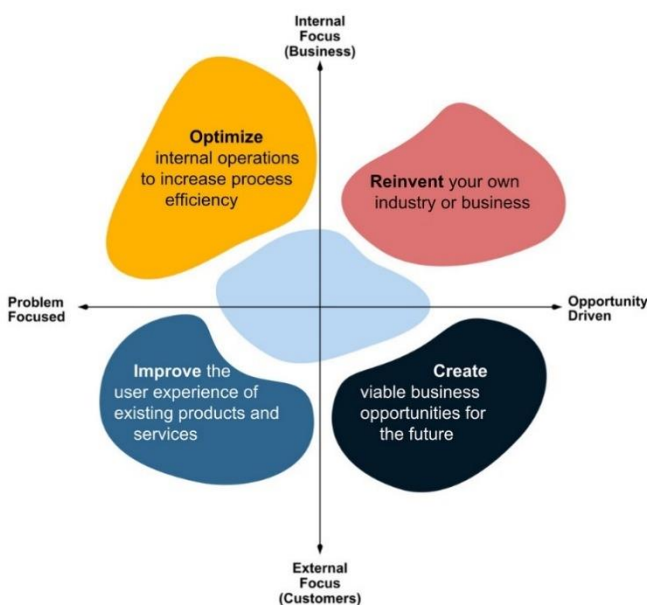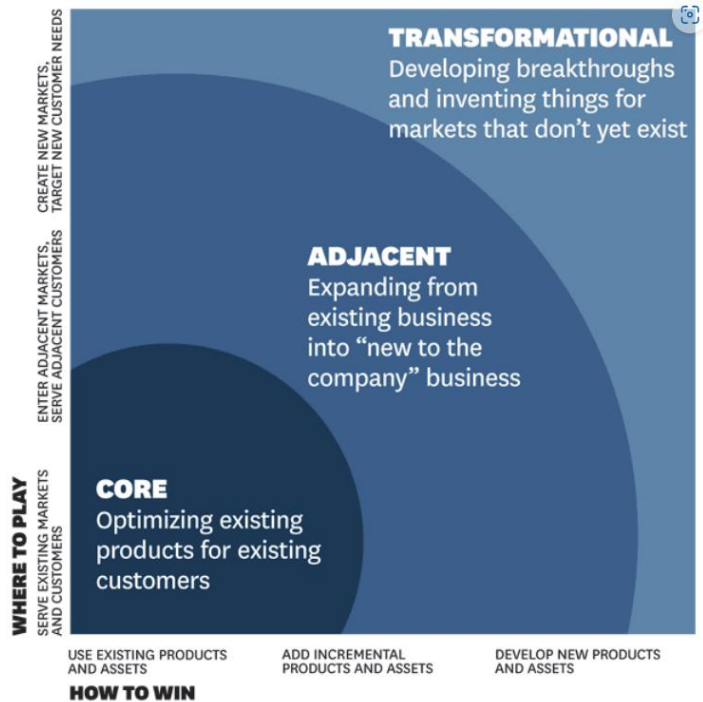
Positioning and portfolios

Positioning of innovation activities refers typically to how disruptive an organisation wants their innovation efforts to be.

Research conducted by Harvard Business Review shows that companies that allocated about 70% of resources to core initiatives, 20% to adjacent ones, and 10% to transformational ones outperformed their peers.

Without an innovation strategy that clearly states an organisations targets for transformational innovation, efforts will typically remain in the core/ incremental area of innovation, resulting in potential missed opportunities.

Organisations can also determine their desired innovation positioning by looking at the differentiation between focus area (internal versus external) and innovation creation (problem-focused versus opportunity drive). The resulting four quadrants can be labelled a optimise, improve, create and reinvent.

An innovation **portfolio** refers to a collection of different innovation initiatives or projects that a company or organization is undertaking or planning to undertake. It's a strategic approach to managing and organizing a company's innovation efforts to ensure that they align with its goals and objectives.

Innovation portfolio management involves selecting and prioritizing innovation projects based on their potential value and impact, as well as their alignment with the company's overall strategy. The portfolio may include a mix of incremental innovations aimed at improving existing products or services, as well as more disruptive innovations aimed at creating new products, services, or business models.

An innovation portfolio can be used to track the progress of different innovation initiatives, monitor resource allocation, and make informed decisions about which projects to pursue or terminate based on their performance and alignment with the company's goals. It can also help to balance risk and return by diversifying the portfolio with a mix of high-risk, high-reward projects and lower-risk, more incremental projects.

Overall, an innovation portfolio provides a framework for companies to manage their innovation efforts strategically, increase their chances of success, and achieve their long-term growth and profitability objectives.

There are no strict rules about how organisations define innovation portfolios. They can be based on timing/ horizons, subject matter, etc. The image to the right is an example of Nesta's innovation portfolio.

Figure 1: Nesta's portfolio of financial commitments to innovation
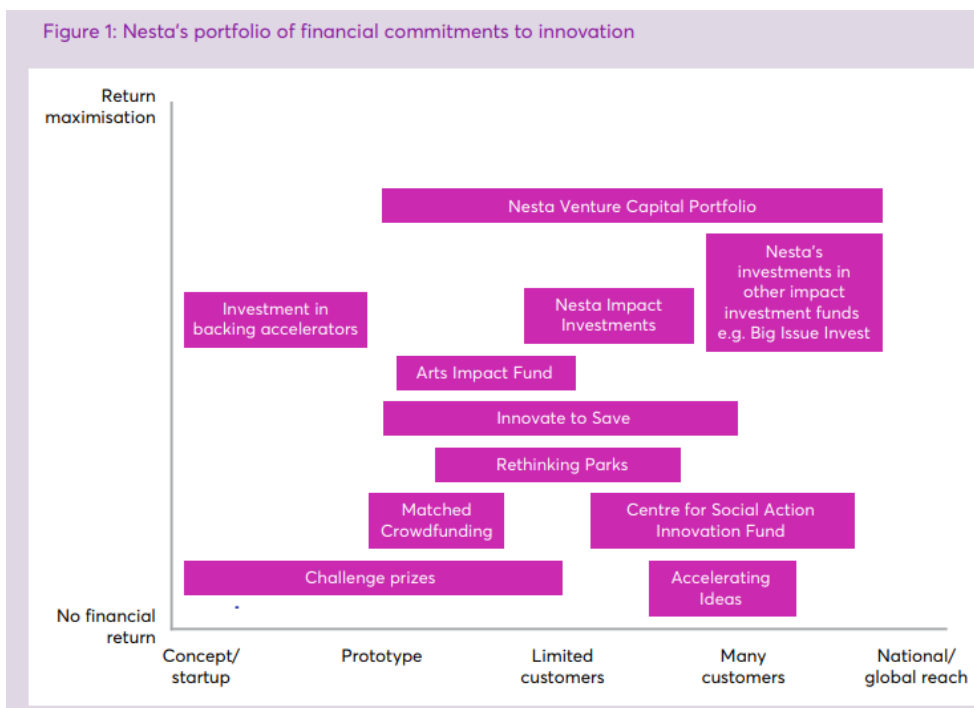
Types of innovation strategy

It's also important to differentiate between two potentially different components of an innovation strategy, as outlined by Hakan Ozan:

- **Innovation management strategy** – This is the strategy for *how* the organisation intends to operate innovation management, outlining the future innovation management system that describes how the innovation process and system should look like in the near future. This includes an understanding of strengths, opportunities and a pathway to get there. the innovation management strategy is the strategy for how to improve innovation performance. It aims to minimize the gap between current innovation performance and desired innovation performance.
- **Innovation strategy** – The innovation strategy sets the direction and focus of the innovation management system. It specifies how the innovation management system and services are to be utilised – what problems or opportunities should they focus on. As such, it is closely connected to an innovation portfolio and contains guidelines for innovation positioning and horizons (incremental to radical), as well as instructions for which innovation projects to approve and how to evaluate them.

Where the innovation management strategy depicts the *how*, the innovation strategy points out the *what*.

The relationship between innovation strategies and innovations

According to LSA Global, "Strategic clarity accounts for 31% of the difference between high and low performing organizations in terms of revenue growth, profitability, customer satisfaction, and employee engagement. On top of that, 70% of employees don't even know or understand corporate vision, and feel so disconnected from it that they can't explain how it relates to their job."

Leadership should have a clear understanding of the corporate strategy and vision, and be able to communicate those values to employees of all levels throughout an organization. Without this clarity coming from the top, teams will move slower, veer off course more easily, get distracted, and ultimately burn resources that your organization probably doesn't have more quickly.

3. **Social innovation**

Best practice organisations are not just using innovation to remain competitive. They are also using innovation to identify solutions to complex problems associated with sustainability. Even the United Nations has identified the need for increased innovation efforts to achieve its Sustainable Development Goals (SDGs).

Innovation is being used to support sustainability and social outcomes in a variety of ways, from developing new technologies to promoting social entrepreneurship and collaboration. Examples include:

- **Sustainable technology**: One of the most common ways innovation is being used to support sustainability is through the development of new technologies that reduce environmental impact. For example, renewable energy technologies such as solar, wind, and geothermal power are being used to replace fossil fuels and reduce greenhouse gas emissions.
- **Circular economy**: Innovation is also being used to promote the circular economy, which aims to keep resources in use for as long as possible through recycling, refurbishment, and reuse. Circular business models, such as product-as-a-service and closed-loop supply chains, are being developed to minimize waste and increase resource efficiency.
- **Social entrepreneurship**: Social entrepreneurship is another area where innovation is being used to support sustainability and social outcomes. Social entrepreneurs are creating new businesses that aim to address social and environmental problems, such as poverty, inequality, and climate change.

- **Collaboration and partnerships**: Collaboration and partnerships are also key to promoting sustainability and social outcomes through innovation. Governments, businesses, and organisations are working together to develop and implement solutions to complex social and environmental challenges, such as access to clean water and sanitation, food security, and affordable housing.

Overall, innovation is being used as a tool to create positive social and environmental impacts, and support sustainable growth. By promoting new ideas and approaches, and collaborating across sectors and disciplines, innovative solutions to some of the world's most pressing challenges are more likely to be discovered.

4. Governance and resourcing

Best practices in relation to governance and resourcing include considered approaches to process management, and decision making, as well as the roles that carry out and support innovation activities.

Governance

The term "governance" is often associated with bureaucracy, administrative overhead and sluggishness. However, as outlined in Why Governance Matters, without a good governance system, innovation is typically unpredictable, slow, not agile, and non-flexible.

Innovation governance can be thought of as a system of mechanisms to align goals, allocate resources and assign decision-making authority for innovation, across the company and with external parties.

Innovation governance responsibilities can include:

- Defining roles and ways of working around the innovation process
- Defining decision power lines and commitments on innovation
- Defining key responsibilities of the main players
- Making decisions that define expectations
- Making decisions on innovation budgets
- Prioritising innovation activities across divisions
- Establishing management routines regarding decisions and communication.

The model to the right, adapted from ISO 38500 - Corporate Governance of Information Technology, highlights the recommended focus of whole-of organisation innovation governance mechanisms – **Direct**, **Evaluate** and **Monitor**.

Jean-Philippe Deschamps, in Imperatives for an Effective Innovation Governance System, outlines eight success factors for effective innovation governance. They include:

1.   The level of commitment and engagement of the top management team – particularly the CEO – behind the chosen model.
2.   The breadth and depth in the scope or coverage of the implemented model, in terms of process and content, as well as hard and soft issues.
3.   The relative independence of the model with regard to the unique personality and skills of a single individual, i.e. its robustness vis-à-visa change of actors.
4.   The ability of the model and its key actors to gather broad and proactive support from the rest of the organization.
5.   The inclusion of adequate checks and balances in the model, as well as processes and tools for continuous performance evaluation and improvement.
6.   The robustness of the model vis-à-vis external pressures and crises, in terms of allowing the company to 'stay the course' and meet its long-term innovation performance objectives.
7.   The capacity of the model to evolve, enlarge its scope and grow with the company, particularly when operations and market coverage are being globalized.
8.   The clarity and accessibility of the governance model for the board of directors, for information and auditing purposes.

Roles and responsibilities

A system approach to innovation management also requires a range of roles and responsibilities to be fulfilled to ensure the success of the innovation program. Below are some of the more common roles and responsibilities adopted by best practice organisations to support a system approach to innovation management:

- **Innovation leader:** An innovation leader is responsible for setting the strategic direction of the innovation program and ensuring that it aligns with the organization's overall goals. They provide leadership and guidance to the innovation team and ensure that resources are allocated effectively.
- **Innovation manager:** An innovation manager is responsible for managing the innovation program on a day-to-day basis. They oversee the innovation pipeline, identify opportunities for improvement, and ensure that projects are delivered on time and within budget.
- **Innovation team:** An innovation team is responsible for generating and developing new ideas, as well as testing and refining them. The team may include designers, engineers, researchers, and other specialists who bring a range of skills and expertise to the innovation process.
- **Project manager:** A project manager is responsible for managing individual innovation projects within the innovation program. They ensure that the project is delivered on time, within budget, and to the required quality standards.
- **Business development manager:** A business development manager is responsible for identifying new market opportunities and developing strategies for commercializing new products or services. They work

closely with the innovation team to ensure that new products meet customer needs and align with the organization's overall strategy.

- **IP manager:** An IP manager is responsible for managing the organization's intellectual property (IP) assets. They ensure that IP is protected, licensed, and used effectively to support the organization's innovation goals.
- **External partnerships manager:** An external partnerships manager is responsible for identifying and managing partnerships with external organizations, such as universities, start-ups, and research organizations. They work closely with the innovation team to identify new ideas and technologies that can be leveraged to support the organization's innovation goals.

Overall, a system approach to innovation management requires a range of roles and responsibilities to be fulfilled to ensure the success of the innovation program. This includes leadership and guidance, project management, idea generation and development, business development, IP management, and external partnerships management.

The table below provides a similar summary of innovation roles and responsibilities, including their relevance to organisations by size.

ROLE	DESCRIPTION	SMALL	MEDIUM	LARGE
INNOVATION DIRECTOR (BUSINESS DEVELOPMENT DIRECTOR)	Part of the board of the organization or someone who reports to one of the board members who is responsible for innovation. This person puts together the innovation framework and the innovation team and manages the process of innovation.	–	+/–	+
INNOVATION BOARD (INNOVATION COUNCIL)	A group that mandates the operations/business or are the directors/managers of the departments or divisions itself. This board can be very handy when you want help from the business (or your sponsors) in making the best decisions. When the strategy and budget are in place, the Innovation Board can decide which innovations to start/end and check if innovations are headed in the right direction.	–	+/–	+
INNOVATION MANAGER (BUSINESS DEVELOPMENT MANAGER)	This manager is responsible for one of the domains of innovation. In large organizations, this person reports to the Innovation Director. In small and medium size organizations, this person is responsible for all the innovations and for managing the innovation inbox.	+	+	+
INNOVATION TEAM (BUSINESS DEVELOPMENT TEAM)	The team of people who work full time or part time in the Innovation Team. The people in this team can scout for new innovation ideas, manage innovation sources, and help evolve ideas (problem finding, case building) into ready-to-execute innovation projects.	+	+	+
INNOVATION SPRINT MASTER	Trained experts who facilitate the process of innovation projects. This can be the project leader, but not necessarily.	+	+	+

Legenda: – no need   +/– optional   + necessary

Innovation teams

The role of an innovation team is to identify, develop, and implement new ideas and solutions that can drive growth and create value for the organization. In other words, innovation teams are responsible for exploring new opportunities and creating new products, services, or processes that can help the company stay competitive and adapt to changing market conditions.

Some specific responsibilities of an innovation team may include:

- Conducting research and analysis to identify emerging trends and opportunities in the market.
- Developing new products, services, or business models that can create value for customers and drive revenue growth.
- Testing and validating new ideas through experimentation and prototyping.
- Collaborating with other departments and stakeholders to ensure that innovation efforts are aligned with the overall goals and strategy of the organization.
- Implementing new ideas and solutions across the organization, and monitoring their performance to ensure that they are achieving their intended goals.
- Creating a culture of innovation within the organization, and encouraging employees at all levels to contribute their ideas and insights.

Overall, the role of an innovation team is to help the organization stay competitive and relevant in a rapidly changing business environment, by continuously exploring new opportunities and creating value for customers and stakeholders.

There are a variety of ways in which innovation teams and resources can be organised, as outlined in the diagram below. The best approach is dependent on an organisation's unique size and strategic approach to innovation.

Role of the Innovation team

SHARED SERVICE	DECENTRALIZED SERVICE	DISTRIBUTED SERVICE

- Centrally resourced & managed
- Corporate funding with potential charge-back
- Expertise developed centrally and shared in recurrence with internal customers
- Collectively increased efficiency following with maturity in time
- BU impact traced back to the innovation group

- Independently (Corporate) resourced & managed
- Corporate funding with significant capital investing
- Specialized expertise allocated centrally and maintained within the unit
- Tactical efficiency with fully independent decision-making
- 10x targeted impact fed into the business

- Independently (BU/Dept.) resourced & managed
- Funded by each BU/Dept. separately
- Expertise dispersed across the BU/Dept.'s layers
- Efficiency through domain expertise and focus within each BU/Dept.
- Impact contained within each relevant BU/Dept.

5. Funding

This section talks about three aspects of innovation funding – internal budgeting of organisational approaches to innovation; external sources of funds to support innovation; and investment of funding in external companies.

Organisational budgeting

The best approach to innovation funding is dependent on an organisation's size, industry and business goals. Common types of innovation budgets include:

- **Percentage of Revenue:** This type of budget allocates a certain percentage of the company's overall revenue to innovation initiatives. It usually fits companies of all sizes, as it ensures that innovation is always funded, even during tough economic times.
- **Fixed Amount:** In this type of budget, companies set a fixed amount to spend on innovation each year. This works well for companies with limited resources because they can have better control over their expenditure.
- **Project-based Budget:** As the name suggests, this type of budget focuses on specific innovation projects instead of an overall innovation program. This can be a good option for companies that have a specific goal in mind, such as developing a new product, solving a specific challenge, or entering a new market.

Best practice organisations take innovation seriously and allocate appropriate resources to an independent department to achieve a long-term focus. **If innovation is done piecemeal, by taking resources from other business areas, the limitations stifle creativity.**

Best practice organisations also use their innovation strategy to drive their budgeting approach. For example, organisations can allocate funding dependent on their stated approach to different types and horizons of innovation.

A typical distribution based on the three horizons model could look like:

- HORIZON 1: Improve core business – 60% of the budget
- HORIZON 2: Build incremental new business – 25% of the budget
- HORIZON 3: Create disruptive new business – 15% of the budget

The three horizons approach, or consideration between investing for today and investing for tomorrow, ensures that companies allocate enough budget and resources for each type of innovation so that today's problems get fixed and future value opportunities are also pursued in a timely and balanced manner.

Developing an innovation budgeting policy is one thing, but following through with the implementation and day to day execution is more difficult. Sticking with the chosen approach to execute on a long-term roadmap is typically dependent on the appropriate governance mechanisms being in place to ensure budget allocations are adhered to.

FOUR SPENDING CHOICES FOR TODAY VS. TOMORROW

		BENEFITS	MANAGEMENT SYSTEM	MARKET IMPACT
TODAY ↑	Daily operations turbulence	Deliver results, sustain success	Within existing organization, ROI	Within existing value network and customers
	Incremental improvement	Faster, cheaper (efficiency)	Within existing organization, ROI	Within existing value network and customers
	Sustaining innovations	Better (effectiveness)	Extraordinary structures (e.g., program office) to manage across functions and boundaries, ROI, experimentation	Within existing value network and customers
TOMORROW ↓	Disruptive innovations	Growth (transformation)	Autonomous units to incubate opportunites, venture funding, experimentation	New value networks and customers

In their article An Agile Approach to Budgeting for Uncertain Times, Harvard Business Review outlined a series of questions organisations should be asking when determining innovation budget requirements, including:

- What are the outcomes that will be most important for strategic success?
- Where should resources go? For example, running the business (operations) versus changing the business (innovations)?
- Within innovation, what's the right balance of resources going toward incremental innovation versus breakthroughs?
- How much should go to various customer segments?
- How much should go to different sales and distribution channels, geographies, business units, brands, or product lines?
- How much of our technology resources is properly spent on keeping current systems running versus developing new features or improving architecture?
- What hypotheses must be true for these resource allocation strategies to work, and how can we test them most quickly and efficiently?

External funding sources

In addition to an increased acknowledgement of the importance of innovation for companies to remain viable and competitive, there has been corresponding interest in how countries can become more innovative to stimulate greater GDP, and how not-for-profit groups can use innovation to achieve humanitarian outcomes.

This interest in innovation has led to an increase in funding sources available to support innovation, including institutional and non-institutional funding sources. Funding in the agricultural sector is currently available through the following sources:

- Australian Research and Development Corporations (RDCs)
- Additional federal government funding
- State government funding
- Industry and interest group funding
- Focused Federal, State and industry funding (e.g. sustainability)

Tax incentives for innovation is another common source of funding for Australian organisations.

Outside of traditional approaches to funding, more innovative approaches are emerging, such as:

- **Crowdsourcing** – small sums are sought from multiple contributors, including businesses and private individuals
- **Philanthropic funding** – with an ageing population, the proportion of funding available through philanthropic sources is also increasing
- **Venture capital** - a form of private equity wherein companies (typically start-ups) sell ownership stakes in return for financial support

Investing in external companies

Another emerging approach to financing innovation is via investment in start-ups.

The digital economy has allowed start-ups to rapidly expand and disrupt incumbents, and successful corporations are interacting with these start-ups to gain access to talent and ideas, and to gain insights into innovative culture.

Nestlé is one organisation committed to working with start-ups to bring more products to market, with a dedicated budget approach allowing for more "bleeding edge" initiatives.

In 2016, Nestlé announced a joint venture with R&R, a leading ice cream company based in the United Kingdom. The venture offers products, including those from Nestlé's European frozen food business, in Europe, the Middle East (excluding Israel), Argentina, Australia, Brazil, the Philippines, and South Africa and chilled dairy business in the Philippines. Nestlé has gained R&R's competitive manufacturing model and significant presence in retail.

More bleeding-edge projects for Nestlé include a new partnership with Rabobank and RocketSpace for the Terra Food + Agtech Accelerator. The venture will select and coach some of the most innovative and disruptive start-ups in the food and agricultural industry to create healthier and more sustainable food products.

Innovation accounting

Traditional accounting tends to assume that a product is already established with revenue and accompanying expenses while new products or start-ups have no revenue and burn resources. Few innovation ventures stand up to scrutiny based on financial ratios or cash-flow analysis.

Studies have shown that traditional accounting methods typically have a stifling effect on creative efforts. Traditional accounting practices typically look at criteria such as:

- market size
- gross margins
- revenue potential
- time to breakeven
- performance demands
- existing customer requirements
- return on investment
- risk profile
- short term KPIs

However, as Steve Glaveski from Collective Campus notes, the nature of disruptive innovation is such that:

- the market is small or insignificant, initially
- they promise low margins, initially
- they deliver small revenues, initially
- they can take years to deliver a sufficient return on investment
- they are often not good enough for existing customers, initially

Disruptive innovations however get better over time and as such, the market grows, the margins get larger and the revenue potential becomes significant.

The consequence of this is that large organisations miss out on opportunities to invest in or support potentially disruptive innovations and find themselves investing only on stretching their existing S-curve and sustaining their existing business model until they are disrupted by newcomers who embraced the disruptive innovation in a timely manner.

Airbnb is a great example of a company that made only US$200 per week in its first year of operating, but today is worth US$25B.

Best practice organisations are instead looking at different evaluation criteria when assessing whether ideas should be funded, such as:

- apply the disruptive innovation litmus test (does this idea have the potential to disrupt or is it a low risk, low reward incremental improvement?)

- what customer job are we addressing and are customers over-served or under-served by existing solutions?
- value proposition (are we actually solving a problem?)
- ability to deliver technology (can we build it?)
- existing competition (are we entering a treacherous red sea or a clear blue sea?)
- analogs and antilogs (has it been done before? are there stories of success and failure?)
- testability (can we test it relatively quickly, economically and effectively using our existing networks and ability to prototype?)

Galveski's point is that posing these questions for each innovation and rating them as far as risk is concerned is far more relevant and purposeful than going with the following statement: *"We expect this new innovation to generate 5% of our revenue growth target for the year and if it doesn't within 6 months we'll can it."*

6. Pipeline process

The pipeline, which includes ideation and idea management, is the most traditional aspect of innovation and incorporates the acts of generating, developing, and refining new ideas to address a specific problem or challenge. The process usually involves multiple steps, including:

- **Define the problem**: The first step in the ideation process is to clearly define the problem or challenge that needs to be addressed. This involves identifying the goal, target audience, and constraints that the solution must work within.
- **Research and gather information**: Once the problem is defined, it is important to gather information about it. This can involve conducting market research, analysing data, and exploring existing solutions.
- **Generate ideas**: With a clear understanding of the problem and relevant information, it's time to start generating ideas. This can be done through brainstorming sessions, individual idea generation exercises, or other techniques such as mind mapping or SWOT analysis.
- **Refine ideas**: After generating a list of potential ideas, the next step is to refine them. This involves evaluating each idea against specific criteria such as feasibility, potential impact, and relevance to the problem. Ideas that don't meet the criteria are discarded, while promising ideas are refined and developed further.
- **Test and iterate**: Once a set of refined ideas has been identified, they need to be tested and iterated upon. This involves creating prototypes, testing them with users, and gathering feedback to identify areas for improvement.
- **Implement the solution**: The final step in the ideation process is to implement the solution. This involves creating a plan for implementation, identifying resources needed, and executing the plan.

Throughout the ideation process, it is important to stay open to new ideas and be willing to pivot or change direction if necessary. It is also important to involve stakeholders and team members in the process to ensure that all perspectives are considered and to foster a sense of ownership over the final solution.

Design thinking

The design thinking process is a common approach to identifying and refining ideas and is used by best practice companies such as Apple. A key characteristic of design thinking is the double diamond approach that first places emphasis on clarifying the opportunity or brief on which to base ideas, then on selecting and progressing ideas.
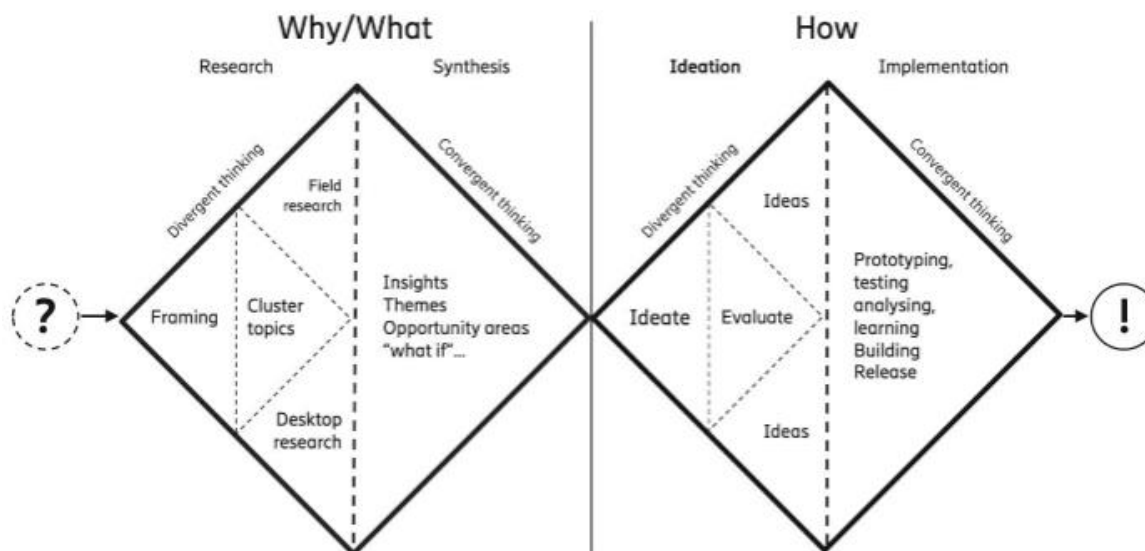
Organisations with the best practices in idea management have sturdy yet flexible processes that guide teams across the innovation process and adopt the following practices:

- **Identify and record ideas**. The best companies have an easy-to-find record of how every product evolved so future teams can see where things went right and wrong. You need that context and guidance in the ideation phase. Also, keep a repository of "not-ready-for-primetime" ideas that may be too innovative for today's market.
- **Align ideas to business strategy**. The best ideas aren't always the best fit for your company. Steve Jobs may have made the best salsa, but that wasn't how Apple made money. Make the company's mission your North Star during the ideation phase so only the best and most appropriate ideas advance.
- **Create an idea advancement process**. If an idea has merit, there should be clear action items to commence the development process. This process should be in place before a single brainstorming session begins.
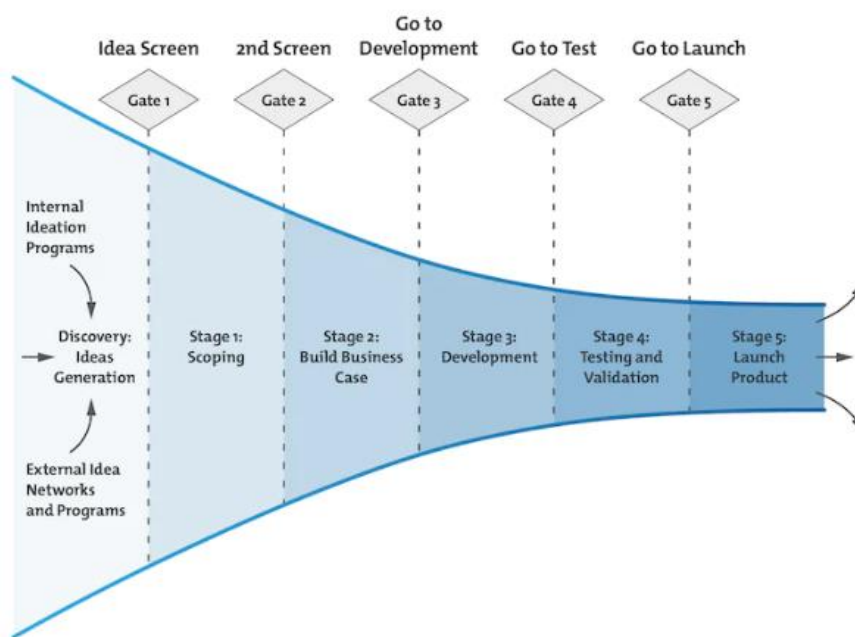
Stage gates

Best practice approaches to idea management include a series of "stage gates" wherein innovation team members seek input and/ or approval from an advisory body before proceeding to the next stage of the process.

In the example below, there are six stages covering:

- **Stage 0 – Discovery**. First, generate lots of new ideas. Get creative by using ideation tools like brainstorming, design thinking, ethnographic research, and Doblin's 10 Types of Innovation.

- **Stage 1 – Scoping**. Now explore your ideas' true potential by doing a quick, inexpensive preliminary investigation. Explore the strengths and weaknesses of your ideas, and evaluate the extent to which they are viable business opportunities. SIPOC diagrams and CTQ trees can be useful tools to employ during this stage.
- **Stage 2 – Build a business case**. Next, it's time to delve into the detail. You need to know whether an idea has a real shot at success. So, do some in-depth market research and use this information to develop a business case. Include a definition of the project, its risks and benefits, and the costs and timelines.
- **Stage 3 – Development**. Now you have the exciting job of developing and designing a prototype. You'll also begin to plan what you need for full-scale production. This stage will likely involve the biggest financial risk so far, so be sure to keep tight control of your budget.
- **Stage 4 – Testing and validation**. Trial the product with potential customers, and use their feedback to refine it. This stage also involves testing your branding and marketing, as well as the production operations that you sourced in stage three.
- **Stage 5 – Launch**. Finally, it's time to launch your product on the market. This stage is the beginning of full-scale production, marketing and sales activities.

Stage gate meetings require clear criteria for projects to be assessed against before progressing, such as:

- Strategic fit.
- Product and competitive advantage.
- Market attractiveness.
- Technical feasibility.
- Core competencies.
- Financial reward and risk.

Another useful tool for prioritising ideas is the Innovation Impact Model (below). This tool is used by rating ideas against expected investment requirements and impact.

INNOVATION IMPACT MODEL
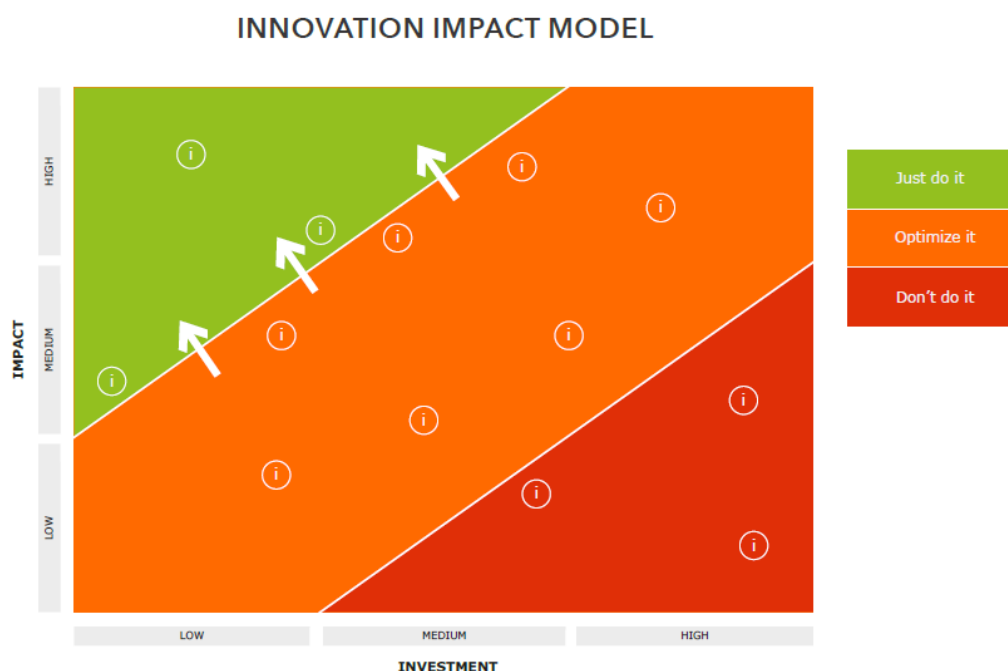
7. Employee engagement

Research shows that diversity is key to successful innovation, and that restricting innovation to specific teams or individuals is not effective. Instead, everyone in a company should be invited to present their views.

Google is renowned for encouraging all of their employees to set aside time purely to work on personal projects and explore new ideas. Ericsson ONE provides team members with dedicated resources to pursue ideas – including coaching, funding and access to subject matter experts.

At Ericsson, anyone can submit an idea, at any time, through a simple online tool. These ideas are reviewed by a dedicated team and the ones with the most potential are given the opportunity to start building a new business and invited to pitch for investment.

At Toyota, employees submit more than 700,000 implemented kaizen process improvement ideas every year. A machine operator might propose a tool modification that would help increase the throughput rate, or a forklift driver might suggest that stacking containers in a different way could improve materials flow.

Nestle incorporates a range of strategies to encourage its employees to be innovative, including:

- **Innovation challenges**: Nestle conducts regular innovation challenges to encourage employees to come up with new and innovative ideas. Employees can submit their ideas, and the best ones are selected for further development and implementation.

- **Idea crowdsourcing**: Nestle uses idea crowdsourcing platforms to gather ideas and feedback from employees across the company. These platforms provide a forum for employees to share their ideas, collaborate with others, and receive feedback from the wider organization.

- **Training and development**: Nestle provides training and development opportunities for employees to help them develop skills and knowledge related to innovation. This includes courses in design thinking, creative problem-solving, and other relevant areas.

- **Intrapreneurship program**: Nestle has an intrapreneurship program called InGenius that encourages employees to develop and launch their own innovative ideas within the company. This program provides funding, support, and mentorship to help employees turn their ideas into reality.

- **Innovation labs**: Nestle has established innovation labs in various locations around the world, which provide a space for employees to collaborate and experiment with new ideas and technologies. These labs also serve as a hub for external partnerships and collaborations with start-ups and other organizations.

- **Employee recognition**: Nestle recognizes and rewards employees who contribute innovative ideas and initiatives. This includes internal awards and recognition programs, as well as external recognition through industry awards and accolades.

Research shows that **the best way to inspire innovative thinking isn't to force a brainstorming session, it's to create an ongoing conversation**. The quality of conversation is an important factor in determining the quality of creativity and innovation.

This requires a clear process to collect and filter innovation ideas with a trained innovation team to execute innovation projects in partnership with the business.

Whatever process is used to capture ideas from employees, it must be consistent and carefully managed, providing feedback to all employees and transparency about decision processes. Without this, employees can become cynical or disillusioned.

8. Measurement

The main role of innovation metrics is to make sure you're doing enough of the right activities to reach your goals with measures typically divided between two categories: input and output metrics.

Input metrics measure if you're doing enough of the right activities to reach your goals and whether you allocate your resources properly, whereas output metrics measure whether these activities and resources have had athe desired impact on the innovation process.

Examples of input metrics include:

- R&D spend as a percentage of sales
- The number of innovation projects started
- The number of new ideas in the pipeline

- Number of new employees in R&D

Viima recommend that input metrics are used in the early stage of innovation as they are more responsive so will trigger needed changes sooner.

Examples of output metrics include:

- Number of new products launched in X amount of time
- Revenue/ profit growth from new products
- ROI of innovation activities
- Actual versus targeted breakeven time for new products

In general, organisations tend to rely on outputs rather than inputs. However, output measures don't provide information on what went wrong and typically have a lag effect, only showing a certain time after activities have taken place. Subsequently, it's recommended that organisations delay introducing output measures until they can be more meaningfully measured.

Viima recommend that input and output metrics be considered against five different categories, as outlined below. The first four of the five categories represent different aspects of innovation management, whereas the remaining one focuses on business and product related metrics.

	Capabilities	Structures	Culture	Leadership/ Strategy	Business/ Product
Input	The number of new challenges provided for employees	The relative or absolute budget allocated to innovation or R&D	The number of new ideas coming from employees vs. management	The % of management's time spent on strategic innovation	The % of capital invested in innovation activities
Output	Number of implemented ideas, average time to implement	The velocity of the build-measure-learn feedback loop	The employee participation in innovation activities	The number of executives receiving training related to innovation	Actual vs. targeted break-even time

Note: Some of the metrics are more straightforward than others, but some of them fit into both categories.

Forbes explains that measuring innovation requires a non-traditional, balanced set of metrics and recommend the following five metrics be measured and results communicated:

- **Participation and engagement -** Innovation does not happen in a vacuum. It requires a constant flow of challenging ideas from inside and outside a company, and you need to measure and communicate your reach. How many employees participate in your program? Are you working across all functions and levels? Are you reaching out to your ecosystem? How many ideas were hatched and implemented? Communicating these metrics inspires others to join and support your efforts. For example, my company

regularly communicates that around 50% of our employees in all 14 functions in more than 60 countries participate in our annual Innovate Everywhere Challenge (IEC), which captures the best and brightest ideas from all employees and provides resources to develop them.

- **Feedback** - Soliciting employee feedback and sharing it transparently across the organization is essential for communicating successes and ways to improve. In our listening sessions and surveys, we've learned that employees are as passionate about new business models and technologies as they are about operational improvements and corporate social responsibility. We've also learned that some employees don't want to be venture team founders, but they want to contribute their skills by joining a team, coaching innovators or even funding ventures. We took this feedback, set benchmarks and remained flexible as we evolved our innovation program. This input led to the development of a mentor network with more than 3,000 volunteers, as well as "angel investors" just like those found in the real startup world.

- **Value and outcomes** - One of the most impactful metrics you can communicate is project outcomes. Stakeholders want to know about the small, measurable milestones and success stories from your innovation programs -- and the more quantifiable the results, the better. Is the program generating patents? Are you engaging directly with customers to validate ideas? Of course, the impact on financial results is the ultimate measure of success. Are your solutions or process improvements cutting costs, influencing bookings or uncovering new revenue sources? Are they contributing to new product development? Promote these metrics internally and externally.

- **Brand and thought leadership** - To win the war on attracting and retaining top talent, businesses must constantly reinforce their innovator brand and showcase their thought leadership to employees, partners, customers and the public at large. Who wants to work for or partner with a company that is not innovating? Who would approach you with their best ideas if you are perceived as an organization that isn't on the cutting edge? College grads wanting to work for large companies has steadily declined, dipping to just 14% in 2016, according to Accenture. They fear large employers won't be committed to their passions, needs and talents for innovation. Big companies in particular must highlight their innovation programs, encourage employees to be active on social media, enlist PR and HR and promote successes with co-development partners. Urge employees to volunteer with local startup accelerators, get them involved as advisors and mentors and have them share their experiences. You'd be amazed how rewarding this is for employees and local communities -- not to mention the company's brand reputation.

- **Cost of inaction -** Explain the cost of not taking any action and not investing in employees, partnerships and new product development. Don't be afraid to let employees and executives know the company might be falling behind the competition while communicating a call to action. The devastating results of corporations that don't innovate are well known -- yet this history of inaction continues to repeat itself as corporate extinctions keep rising because of a failure to embrace today's changes. Thankfully, it's easy to share the hefty price of corporate inaction when it comes to self-disruption.