



Business innovation matrix

A leadership discussion guide to help drive commercial success

This guide has been adapted from the ‘Unlocking the innovation potential of Australian companies’ report authored by CSIRO’s strategic advisory arm, CSIRO Futures. The findings combine desktop research with insights from consultations with Business Council of Australia (BCA) members. The report focuses on one of the greatest innovation challenges – translating research into scalable, commercial outcomes. By considering the strategic questions presented in this guide, leaders can take practical steps to help overcome some of these barriers and improve business outcomes.

Collaboration

This is both an enabler in its own right and an important way to achieve some of the enablers listed below. For example, collaboration helps to support early-stage research, translate and commercialise emerging science and technology, and increase adoption, but it also helps to share risk among innovation partners and build capabilities.

1.1 Practical collaboration considerations for companies

- a. Does the company have an explicit framework that helps it to determine who to collaborate with?
- b. Is the framework regularly reviewed to determine if the company’s collaboration approach is still fit-for-purpose?
- c. Are there areas where there could be greater sharing of funding, resources, and risk?

1.2 Other collaboration considerations

- a. Are factors such as research translation and commercialisation objectives and attitudes relating to IP assessed when selecting innovation partners?
- b. Is there an opportunity to leverage government support to solve industry-wide challenges?

Long term strategy and targeted investment

The most successful innovating companies have a clear innovation strategy that supports their business strategy and prioritises targeted areas of innovation investment to gain competitive advantage.

Long-term strategy

2.1 Practical strategy considerations for companies

- a. Does the company have an explicit innovation strategy?
- b. Does the innovation strategy support the objectives and business model set out in the business strategy?
- c. Is the company’s innovation strategy aligned to a sector-wide or national strategy?

2.2 Other strategy considerations

- a. Is the innovation strategy owned and supported by the leadership team and board and clearly communicated across the company?
- b. Has the company distinguished between the areas where it will lead/fast follow versus those areas where it will be a late adopter?
- c. For each area in the innovation portfolio, is there a clear business case that evaluates objectives, risks, and rewards?
- d. Is there an understanding of the research translation and commercialisation activities needed?
- e. Is there an understanding of the commercial, regulatory, environmental, and social factors that may support or hinder the progression of these innovations?
- f. What internal and/or external sources are used to identify potential market disruptions and/or opportunities?
- g. Does the company have a clear understanding of key players in the market and their innovation priorities?

Targeted investment

3.1 Practical investment considerations for companies

- a. Is there an agreed-upon investment mix between early stage, emerging and commercially available innovations?
- b. Does the investment mix align with the business strategy?
- c. Does the company have a formal process for monitoring and evaluating innovation investments?

3.2 Other investment considerations

- a. Does the company take a diversified portfolio view of innovation investments that balances low-risk innovation investments alongside medium-risk and higher-risk projects?
- b. Does the company have methods for measuring Return on Investment (ROI) that can appropriately account for the uncertainty of breakthrough and disruptive innovation types?
- c. How well does the company understand the full costs of innovation and benefits based on different investment timings?
- d. For each project in the innovation portfolio, is there an explicit understanding of the value of owning IP versus acquiring IP through sharing or licensing?
- e. Does the company’s investment decision-making framework support the assessment of innovation projects at various stages of development, including go/no-go decision gates?

Culture, risk sharing and incentives alignment

Innovation ‘starts at the top’ with senior executives championing innovation, and companies that openly address the cultural aspects of innovation projects, including the allocation of risks and IP, as well as the alignment of incentives, are more likely to see their projects progress through the innovation cycle.

Culture

4.1 Practical culture considerations for companies

- a. Are senior executives in the company seen as champions for innovation?
- b. Does the company have innovation champions at all levels who actively seek to improve the company’s capacity to innovate?
- c. Does the company clearly and openly articulate its cultural expectations with both its internal and external innovation-related stakeholders?

4.2 Other culture considerations

- a. Does the company have a culture that encourages continuous debate, inquiry, and sense checking of new ideas, including ‘blue-sky’ research topics?
- b. Does the company’s culture enable it to openly negotiate risk and IP-sharing arrangements with its external innovation partners?
- c. Does the company’s culture foster the rapid adoption of the best ideas and firm-specific solutions from both Australian and international sources?
- d. Does the company’s leadership draw on learnings from, or actively invest in, senior members with overseas/start-up experience?

Risk sharing and incentives

5.1 Practical risk and incentives considerations for companies

- a. Is there a well-articulated attitude to risk awareness and management that enables the generation and exploration of ideas with a variety of risk profiles?
- b. Are lessons from success and failures routinely identified, shared, discussed, and used to improve future outcomes?
- c. Is innovation effort consistently recognised and appropriately rewarded?

Skills, talent, and capability building

Skills, talent, and capability building: these are all required to successfully develop and deliver an innovation project, and companies need to decide whether to develop these in house or source through an external partner.

6.1 Practical skills and talent considerations for companies

- a. Does the company have skilled personnel that are able to interface with research expertise and are actively building new relationships with external research groups?
- b. Does the company have staff with business development, commercialisation, and entrepreneurial skills that can consider end-markets and commercialisation pathways from the outset?
- c. Does the company have a talent pipeline that seeks to develop, attract, and retain talent (including recruiting for capability gaps)?

6.2 Other skills and talent considerations

- a. Does the company deliberately construct teams with a mix of diverse technical and business skills, attributes, and experiences?
- b. Does the company have the right skills to transform business objectives into the appropriate research translation and commercialisation project questions?
- c. Does the company have the skills to identify and address technology/infrastructure investment barriers and gaps?
- d. Does the company have the skills to identify and then effectively and efficiently engage with a range of potential external solution providers to address firm-specific needs and challenges?

About CSIRO Futures

The CSIRO Futures team is made up of professionals who will work with you and your business to understand your needs and develop tailored strategic insights.

We deliver impact in the following areas:

- Industry Strategy – thought leadership or strategy development to enable growth in an existing or emerging industry by identifying key opportunities and their commercial, social, regulatory and research and development enablers.
- Economic Analysis – to inform growth and technology investments by considering market opportunity size, economic impact and techno-economic cost analysis.
- Technology Scans – strategy and analysis to address key business and innovation challenges by assessing technology options and risks, technology and commercial readiness, capability and technology and research hurdles.

Need help with the guide? Identified some barriers or opportunities? Contact us for a confidential discussion on how CSIRO can work with you to help create clarity.

As Australia’s national science agency and innovation catalyst, CSIRO is solving the greatest challenges through innovative science and technology.

CSIRO. Unlocking a better future for everyone.

Contact us
1300 363 400
csiro.au/contact
csiro.au