



Innovation in AQ Businesses

Insights Note

July 2024



Queensland
Government

Background

This Insights Note provides an overview of findings from a survey of business applicants to Advance Queensland (AQ) programs with the intention to gather **perceptions of business innovation**.

The survey was underpinned by 4 Research Questions:

1. **To what extent are AQ businesses innovating?**
2. What are the **benefits** for AQ businesses that innovate?
3. What are the **challenges** to innovation faced by AQ businesses?
4. What are the **areas of support** required by AQ businesses to innovate?

The survey was administered in April/May 2024 by the Department of Environment, Science and Innovation (DESI), using a reference period of the 2 years to June 2023. A response rate of 19% was achieved, encompassing 593 businesses.

Relevant caveats can be found at the end of this document.



About Advance Queensland

Since 2015, the Queensland Government's Advance Queensland (AQ) initiative has supported Queensland innovators, entrepreneurs and researchers to solve tomorrow's problems.

For more information, [visit the AQ website](#).

Definitions



Several terms have been used throughout this Note and are defined below:

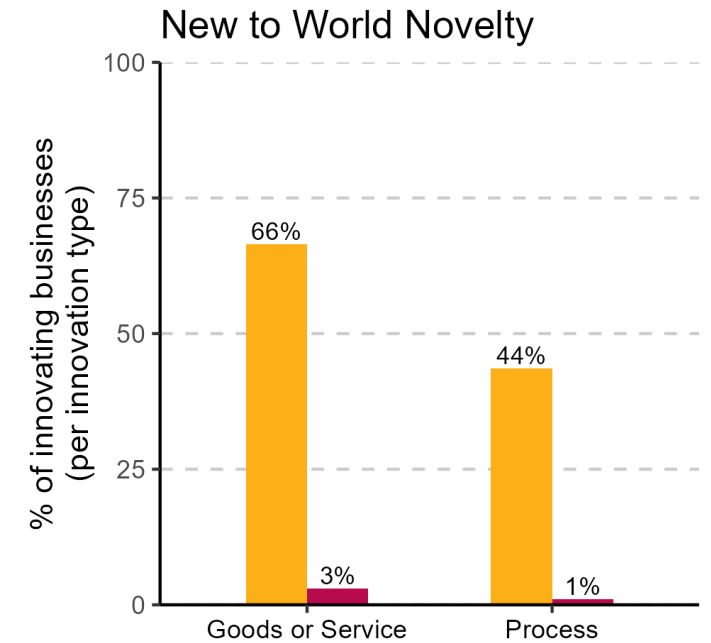
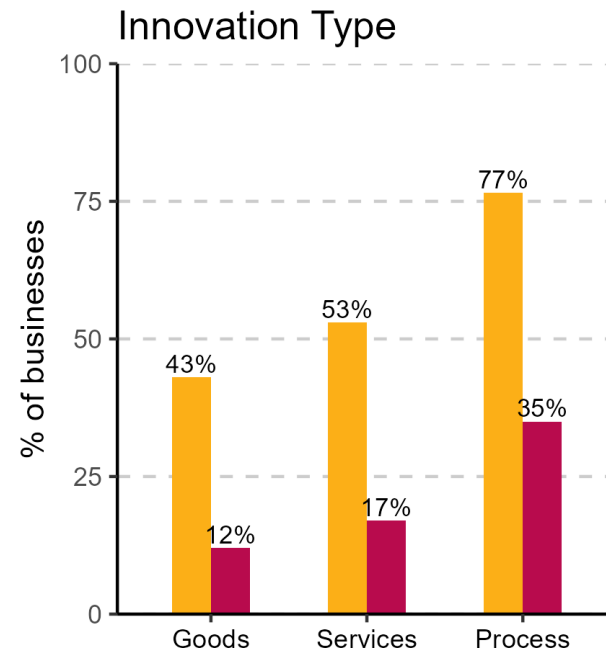
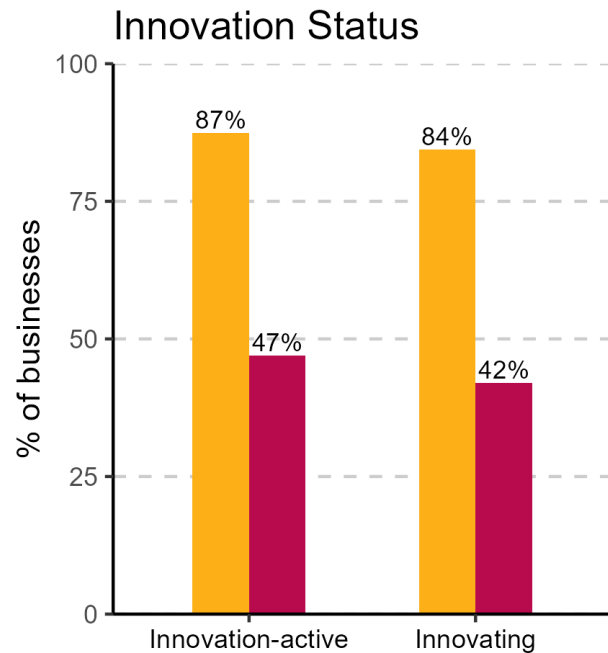
Term	Definition	Source
AQ business	A business which applied to an AQ program. Includes successful and unsuccessful applicants.	---
Typical QLD business	Queensland businesses surveyed as part of the ABS' Business Characteristics Survey for the same reference period.	---
Innovating businesses	Businesses that <u>introduced</u> any type of innovation during the reference period.	Defined by the ABS , and in turn aligned with the OECD's Oslo Manual .
Innovation-active businesses	Businesses that had <u>undertaken any innovative activity</u> during the reference period including: <ul style="list-style-type: none"> • The introduction of any type of innovation and/or; • The development or introduction either still in progress or abandoned. 	
“New to World” Novelty	Businesses that <u>introduced</u> any type of innovation during the reference period.	
Collaboration	Active joint participation with other organisations which involves some sharing of technical or commercial risk. Straight fee-for-service arrangements are not deemed to be collaborative and are therefore excluded.	



To what **extent** are AQ businesses
innovating?

AQ businesses were highly active in innovation

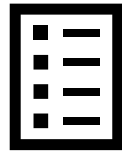
- AQ businesses both attempted and were more successful in innovation compared to typical QLD businesses in the same period
- All types of innovation occurred more frequently, though process-related innovations were most common
- AQ businesses also innovated with far greater novelty



Legend: AQ businesses (orange), Typical QLD businesses (maroon)

AQ businesses also reported that they...

Had an innovation strategy



60%

(of all AQ businesses)

Targeted at least 1 international market[^]



57%

(of innovating businesses)

Collaborated for innovation



55%

(of innovation-active businesses)

[^] with their “Most Significant Innovation”, i.e. the innovation that “has or is expected to have the greatest benefit to the financial position of the business”.



What are the **benefits** for AQ
businesses that innovate?

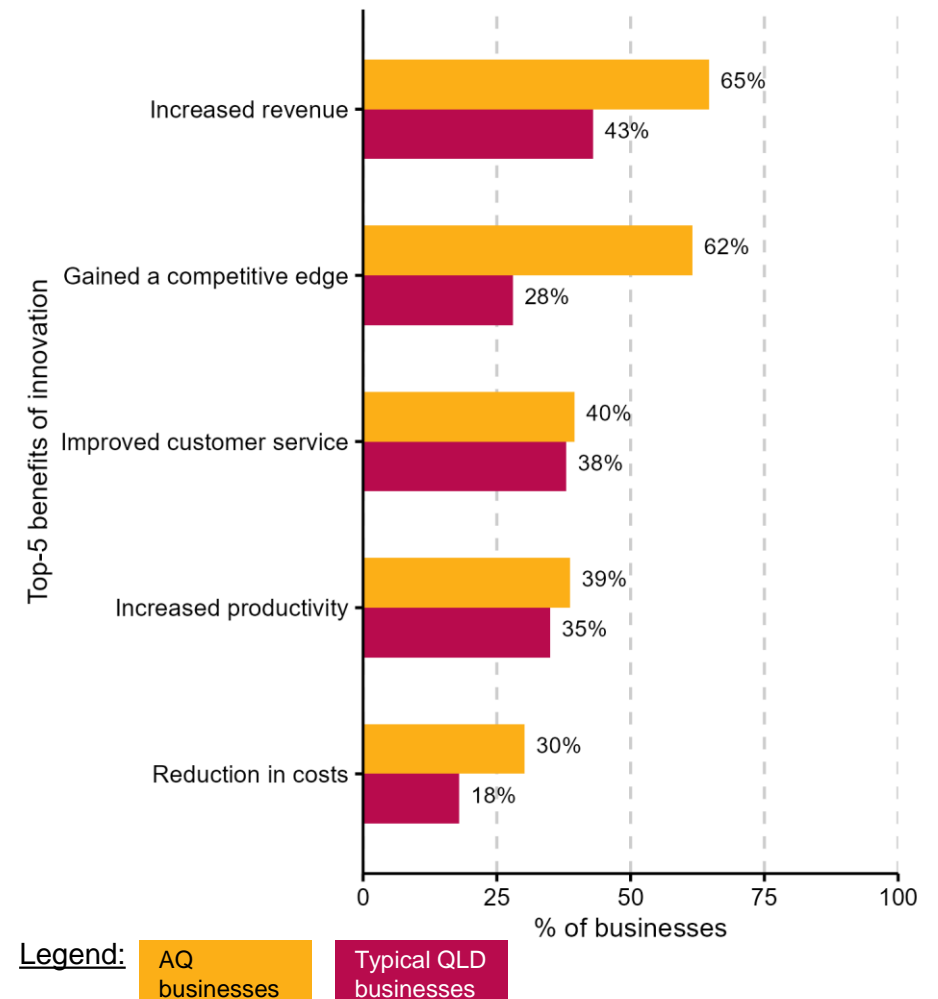
Innovation benefits were typically related to improving financial position

This occurred through:

- **Direct impacts** (e.g. increasing revenue or productivity, cost reductions), or;
- **Indirect impacts** (e.g. gaining a competitive edge, improving customer service)

AQ businesses reported increasing revenue and gaining a competitive edge noticeably more than typical QLD businesses.

Only 3% of AQ businesses reported that they had not observed any benefits from their innovation, compared to 16% of typical QLD businesses.





What are the **challenges** to innovation faced by AQ businesses?

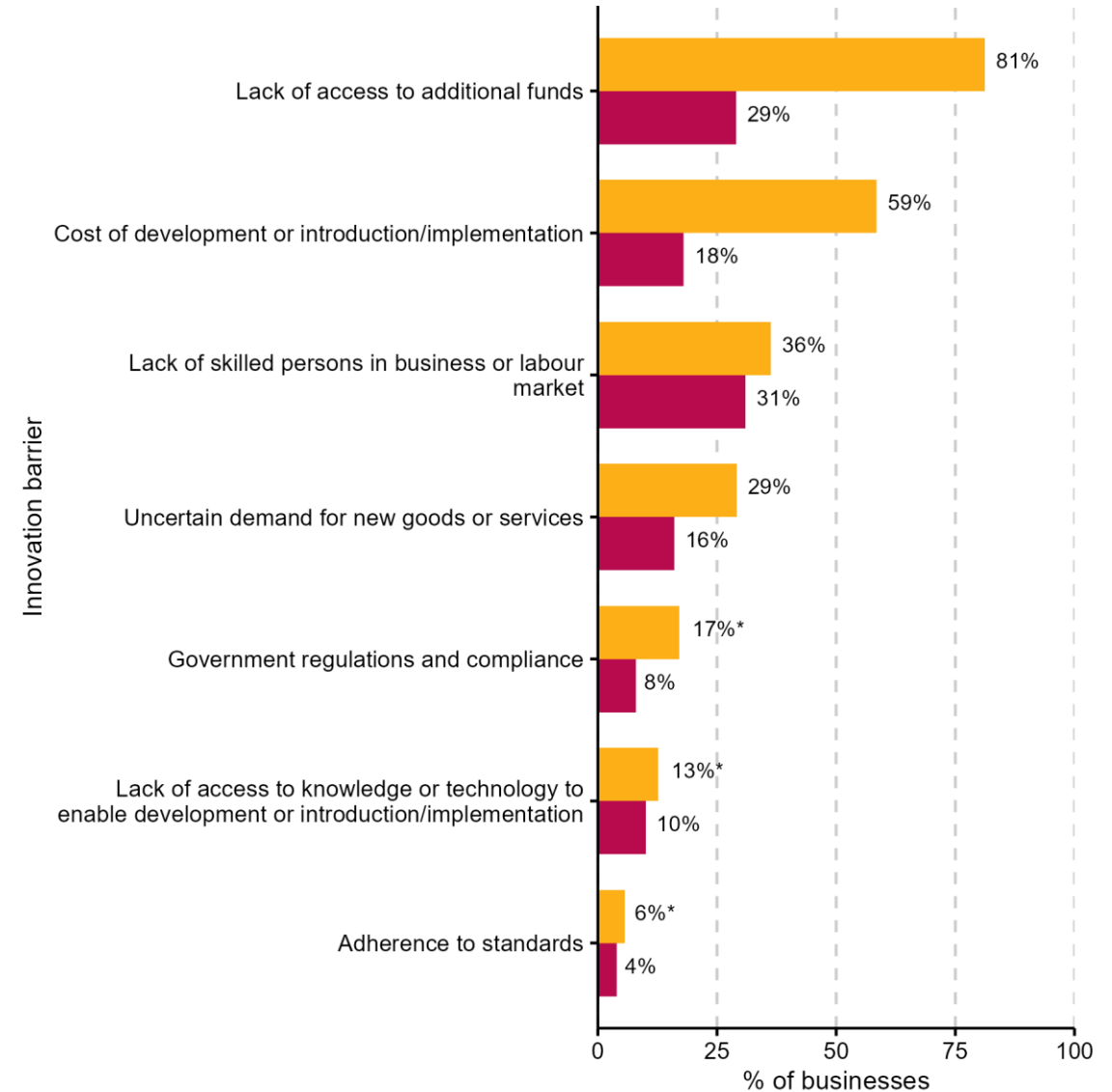
Skills and funding were commonly reported barriers

Funding related barriers were the 1st and 2nd most reported:

- 81% of responding businesses nominated *a lack of access to additional funds*
- 59% reported the *cost of development or introduction/implementation*

Availability of skills was the 3rd most common barrier, reported by just over a third of businesses.

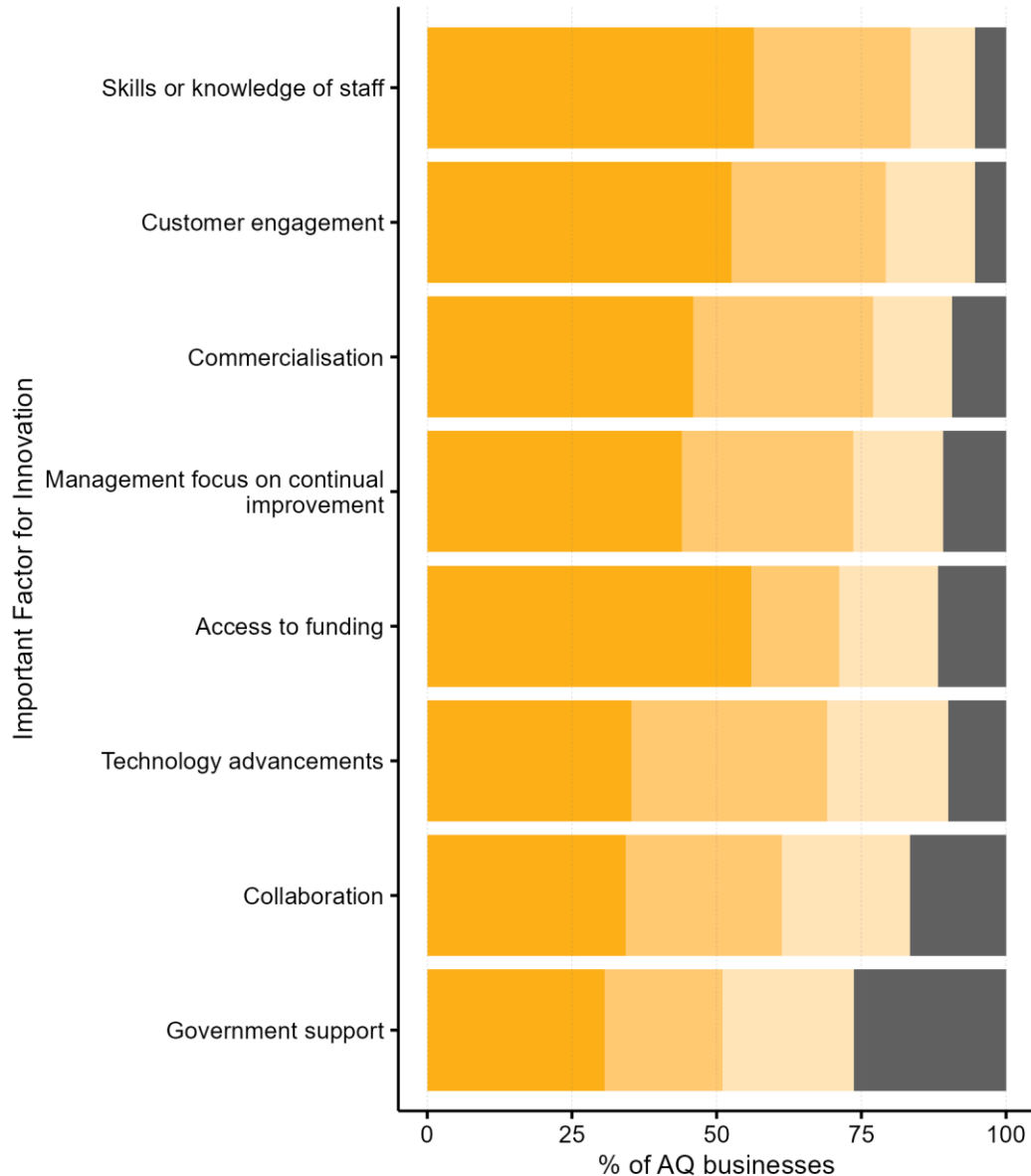
All responding businesses experienced at least 1 barrier to innovation



Legend: AQ businesses (yellow), Typical QLD businesses (maroon)

Note: Figures with a * character indicate a relative standard error of 10-25%

Skills and funding were also reported by over half of AQ businesses as being “majorly important” for innovation



Over 75% of AQ businesses reported the following as being moderately or majorly important for innovation:

- Skills or knowledge of staff
- Customer engagement
- Commercialisation

“Government support” was seen as “not at all” important for innovation by 26% of AQ businesses

- AQ business sentiment was more positive compared to 65% of typical QLD businesses

Importance:



AQ businesses relied upon different funding sources compared to typical QLD businesses

Over 4x more likely to source funding from VC/private equity sources

2x more likely to source funding from existing business owners

- Also the most common source

Less reliant on traditional sources such as banks and finance companies

- Potentially due to the risk profile of AQ businesses

FUNDING SOURCE	QLD	AQ
Venture capital businesses or funds/private equity	7%	30%
Existing owners of the business	16%*	33%
Friends or family of existing owner(s)	14%*	16%*
Banks	33%*	15%*
Finance companies	31%*	8%*

Note: Figures with a * character indicate a relative standard error of 10-25%

AQ businesses relied upon **specialist STEM skills** much more commonly than typical AQ businesses

FUNDING SOURCE	QLD	AQ
Scientific and Research	7%	41%
Engineering	9%	42%
Mathematics	4%	14%
ICT [^]	36%	64%

Likely driven by the **dominance of Professional, Scientific and Technical Services businesses** in the survey sample (~4 in 10 businesses)

Almost 6x more likely to utilise “Scientific and Research” skills

Almost all businesses reported needing specialist skills of some form for innovation



What are the **areas of support** required by AQ businesses to innovate?

Businesses were asked:



*“Thinking about a new good, service and/or process your business is currently developing or would like to introduce in the next two years, please tell us **what enablers would support your business to achieve this.**”*

101 responses were received.

Common enablers were organised into four themes.

Themes of innovation enablers

FUNDING

100%

- Hiring/upskilling employees
- Buying in advisory consultants
- Facilitating commercialisation

IMPROVING NETWORKS

39%

- Investors for funding
- Logistics partners (inc. suppliers, manufacturers and distributors)
- Industry contacts for product testing and identifying potential clients

IMPROVING INTERNAL CAPABILITY

30%

- Corporate management (e.g. financial management, sales, marketing)
- Human resourcing (upskilling and retention)
- Equipment (including digital and physical assets)

GOVERNMENT PROCUREMENT

14%

To support businesses in the earlier stages of maturity:

- As a partner for product testing/verification
- As an initial client (and to improve credibility with investors)

Caveats

- **Surveys by nature capture perspectives of respondents** – inaccuracies may be influenced by respondent recall and subjectivity.
- **Comparisons to QLD figures are for reference only;** QLD figures have been sourced from the ABS' *Innovation in Australian Business Survey* for the same reference period. While the ABS survey intends to provide a view over all businesses across Australia, this survey is targeted at AQ businesses which are a very different cohort.
- **Not all AQ businesses received the survey.** While care was taken to include all businesses out-of-date contact details held by the department impacted distribution.
- **Uncertainty in percentage estimates** are represented as Relative Standard Errors (RSE), indicated by the * character. Flagged figures have an RSE of 10-25% and should be interpreted with caution.

Acknowledgements

DESI would like to acknowledge:

- **AQ applicants and recipients** who took the time to respond to the survey. Without their generous contribution this Insights Note and accompanying analysis would not be possible.
- **Queensland Treasury** for their guidance and feedback, particularly colleagues from the Queensland Government Statistician's Office and the Office of Productivity & Red Tape Reduction
- **Paul Steffens** from the University of Adelaide for providing useful information relating to the Business Characteristics Survey