



Australian Institute
for Commercialisation

→ ideas → opportunities → outcomes →



Accelerating Company Growth through Research Commercialisation

The Australian experience and some policy lessons

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Australian Institute for Commercialisation



Outline of talk

- **Commercialisation and innovation policy deliberations**
- **New trends in commercialisation**
 - Demand pull research commercialisation
 - The role of innovation intermediaries
 - Segmentation of needs according to SME type
 - Services innovation
- **Australian case studies and AIC policy recommendations**



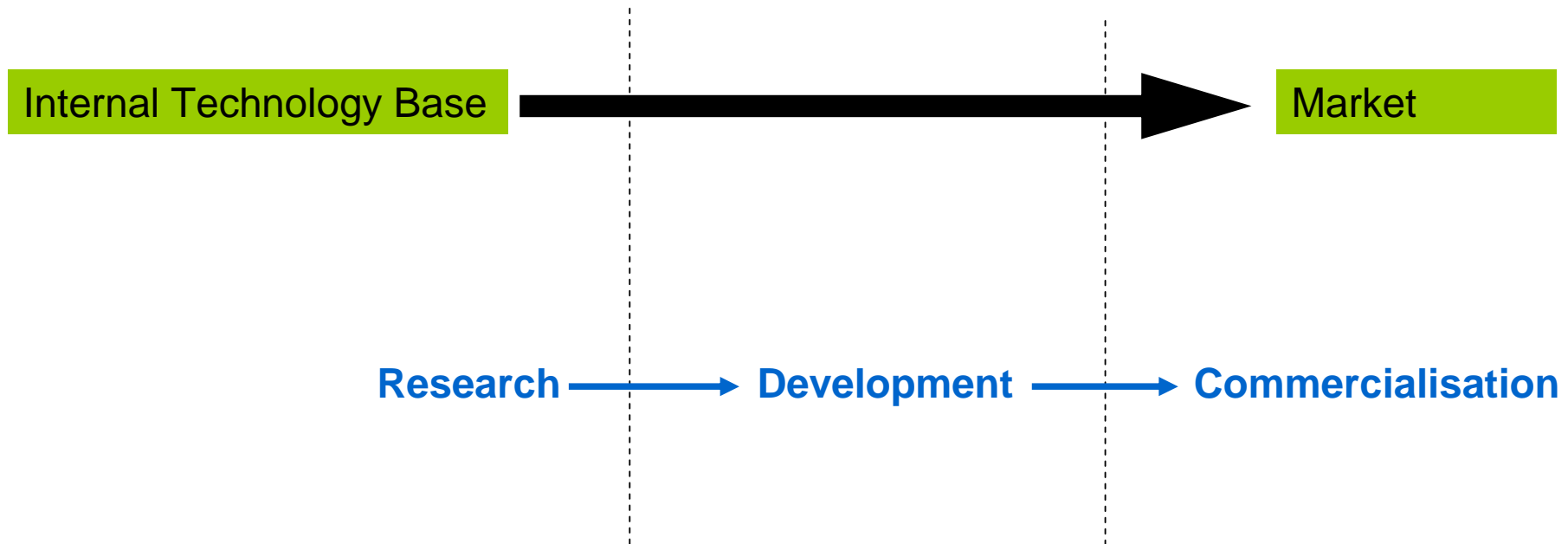


The policy basis for public support of innovation

- Publicly funded R&D is a significant contributor to innovation in the functions performed by governments
 - e.g. environmental management, provision of education, defence, social, and health services
- The existence of spillovers from innovation
 - i.e. benefits captured by others – ideas adapted by firms
 - Challenge is to elicit private investments that would not otherwise have been made (concept of ‘additionality’)
- Spillover returns range between 85 to 180%

Classic Innovation Model

Closed and unilinear innovation model



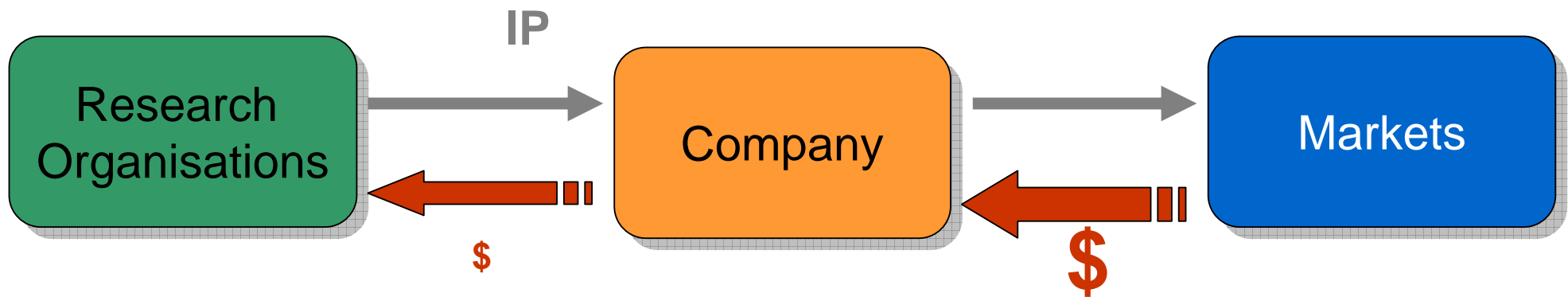


There is a case against public support of research ‘commercialisation’

- ‘Commercialisation’ is perceived very narrowly
- Usually framed in terms of economic benefits that accrue to a single company because of a temporary monopoly
- Nothing bad per se, but how much of the cost should the public bear?



‘Commercialisation’ as perceived



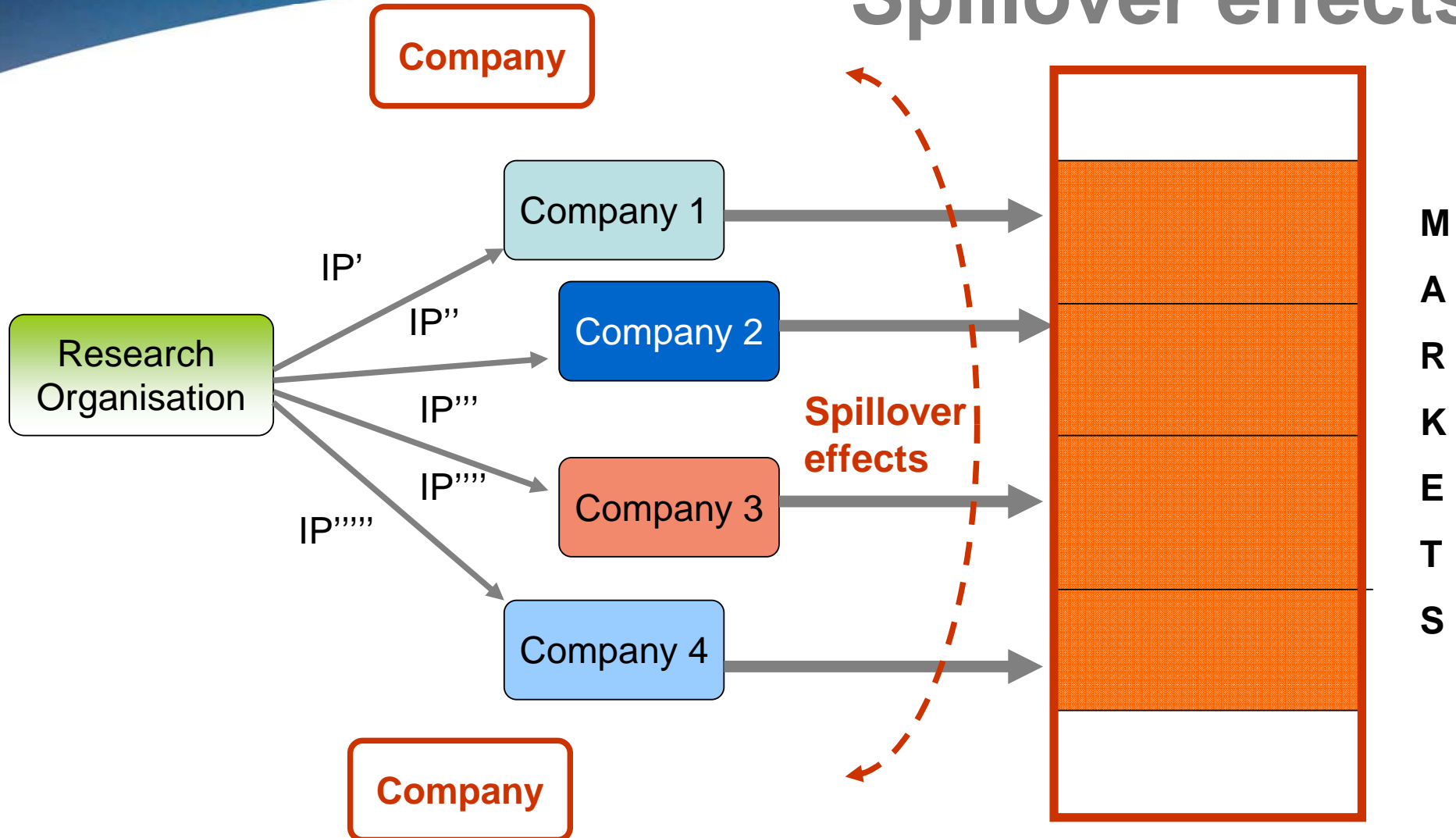
Classic ‘linear’ commercialisation

Provides a temporary monopoly to a company prepared to take the risk

Repositioning ‘commercialisation’ to resolve the policy dilemma

- Frame ‘commercialisation’ broadly as taking an idea to an outcome
- Commercialisation should include knowledge diffusion and contract research rather than just (linear) transfer of IP
- Policy should seek to maximise ***collaboration***

Spillover effects





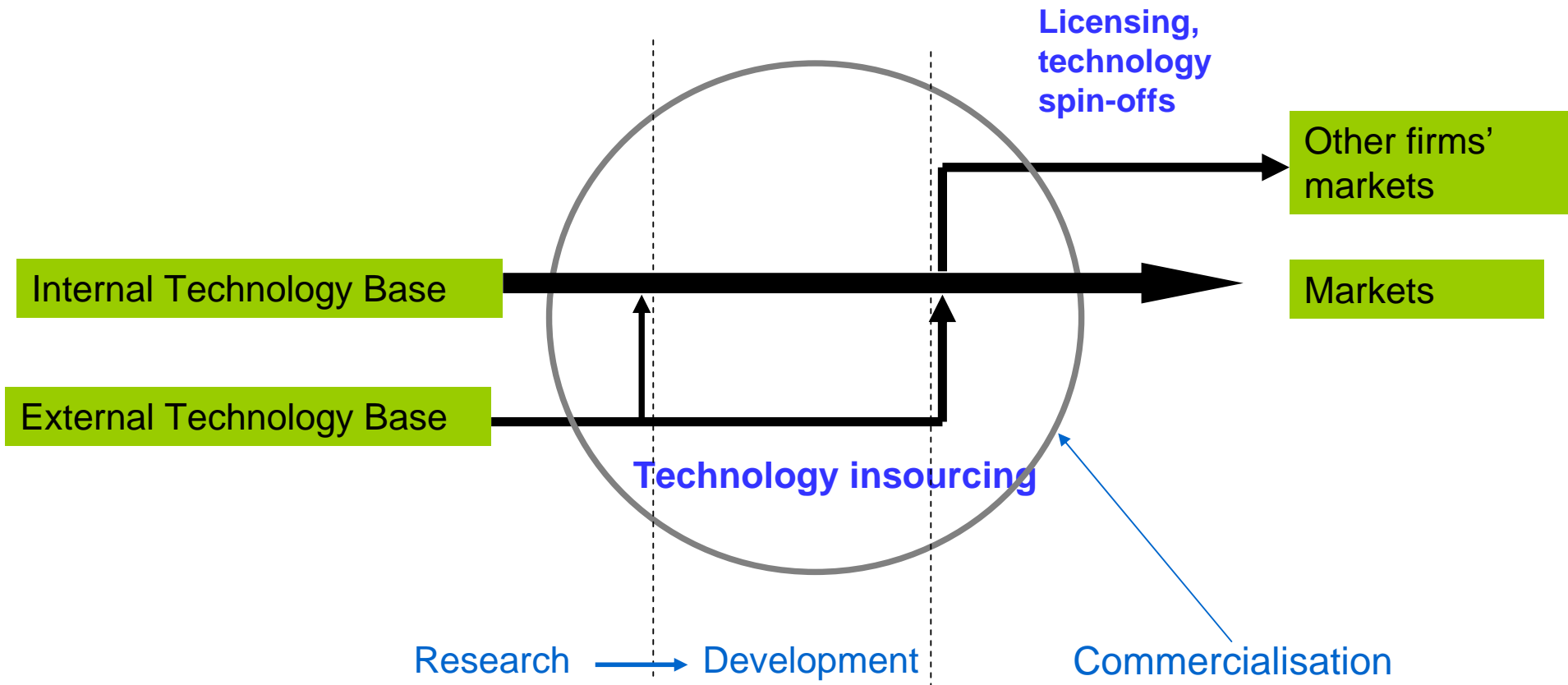
Repositioning 'commercialisation' to resolve the policy dilemma

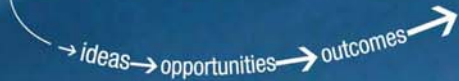
- Frame 'commercialisation' broadly as taking an idea to an outcome
- Commercialisation should include knowledge diffusion and contract research rather than just (linear) transfer of IP
- Policy should seek to maximise *collaboration*
- Commercialisation can be considered part of a value chain that can be applied to researchers, entrepreneurs, SMEs within the context of innovation
- The best commercialisation model is one consistent with the notion of 'Open Innovation'



ideas → opportunities → outcomes

Open Innovation Paradigm





Recent institutional trends in the Australian innovation system

1. Demand pull commercialisation
 - TechFast case study
2. Emergence of independent innovation intermediaries
 - ICT commercialisation case study
3. Importance of a segmented approach to commercialisation
4. Recognition of services innovation



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1. Demand Pull Commercialisation

- Technology Push vs. Market Pull
- TechFast typifies a market pull approach to commercialisation
 - SMEs adopt IP from a research organisation
 - Seeds collaboration, builds trust in the relationships
 - Increases BERD



See www.techfast.com.au for TechFast program information

Case Study - Biotech company (\$3M pa)

Opportunities:

- Prove new claims around an existing product to open new markets
- Develop a new product with significant global market opportunity

TechFast:

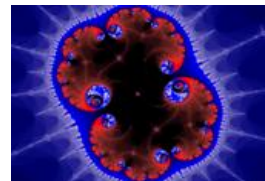
- Identified technologies & expertise at USQ & UQ to enable company to pursue opportunities

Outcomes to date:

- Facilitated access to expertise and technologies from USQ & UQ, positive technical results (outcomes now being commercialised)
- Facilitated another longer term 3-way collaborative project (now commencing).

Company forecasts return from project 1) and 2) will generate:

- Annual revenue increase from US\$3M (2006) to US\$19M (2009)
- 21 additional jobs created by 2009.
- Export revenue to grow from US\$2M (2006) to US\$12M (2009)





Case Study – Defense Services (\$7M pa)

Opportunity:

- Develop technology for a new defense offering and to facilitate entry into several other new industries (underwriting future sustainability)

TechFast:

- Identified ANU had platform technology that could be further developed
- Helped company assess market opportunity (due diligence)
- Facilitated IP licence negotiation between company and the university

Outcomes to date:

- IP has been transferred
- Technology customisation and commercialisation planning is underway

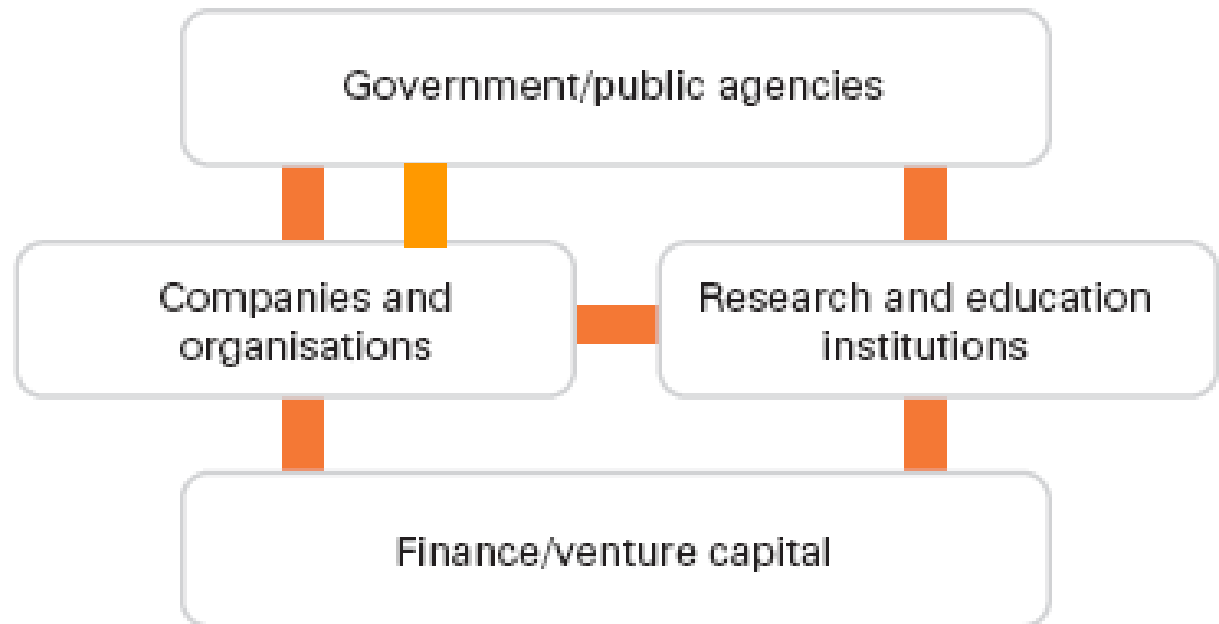
Company forecasts return from TechFast project will generate:

- Additional revenue of \$20M by 2010
- 28 additional jobs by 2010.
- Additional export revenue of \$19M by 2010



2. Innovation intermediaries

- Intermediaries are independent third parties with network knowledge and who can facilitate collaboration and outcomes
- Builds the soft infrastructure
- Recently announced Industry Statement includes funding for a new Intermediary Access Program
- Example:



The National Innovation System



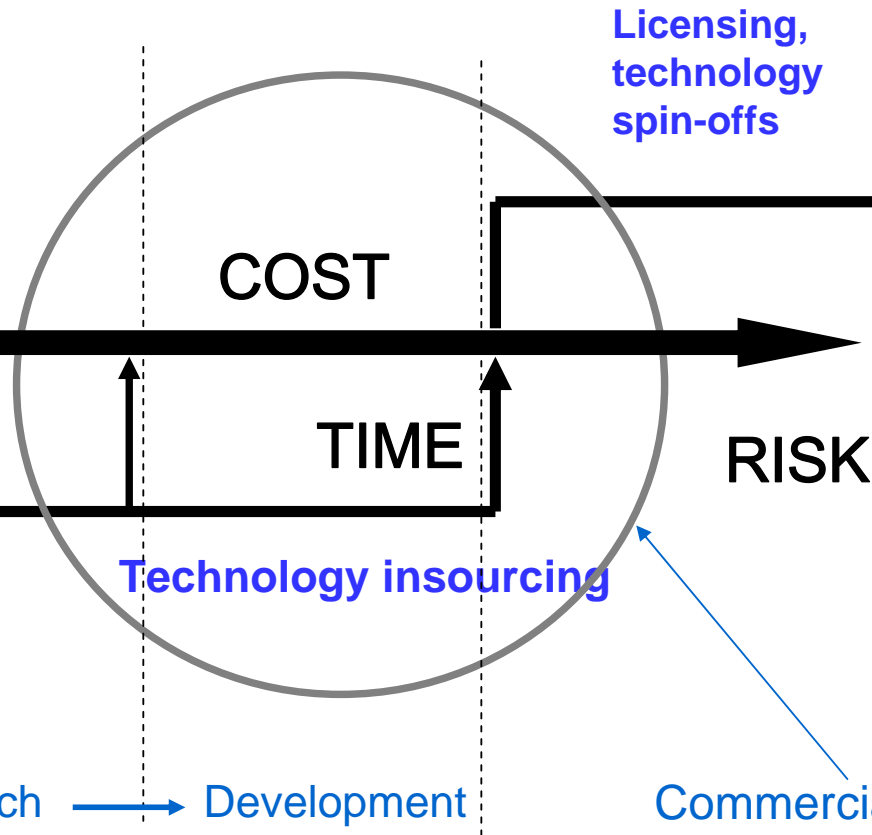
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Inhibitors to Open Innovation

REACH

Internal Technology Base

External Technology Base



Other firms' markets

Markets

Research → Development

Commercialisation

Case Study – Forensics Management System

A Forensics Management System



BACKGROUND

- A software system developed by the Queensland Police Service.
- The system allows information sharing between forensics personnel and is integrated to forensic testing laboratories.

OPPORTUNITY

- Market scan identified commercialisation opportunities across Australia and internationally.

THE OUTCOMES

- Project managed the commercialisation process, identified 3 potential commercialisation partners, provided recommendation report and undertook deal negotiation.
- Resulting commercialisation licence executed involving a South Australian ICT firm with specialist capabilities in police management systems.
- Benefits to QPS include royalty payments and ongoing cost savings through the access to system improvements and modifications undertaken for new clients
- Early product sales achieved nationally and internationally



Case study - Fleetscape

Fleetscape - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://fleetscape.qfleet.qld.gov.au/desktop/index.jsp>

Google Go Links

Queensland Government Hide Menu | Home | Contact us

Fleetscape whole-of-government fleet management

- (Open All) (Close All)
- Logged in as robertsonp (logout)
- My Account
 - My Tasks 0|0|0
 - Task Search
 - Workflow Management
 - Business Activity Monitor
 - Resource Balancing
 - Task Balancing**
 - My Alerts
 - Reporting-Manager
 - Reporting
 - Out of Office Assistant
 - Model Management
 - Policies
 - Vehicle Selection
 - User Management
 - Vehicle Returns
 - Betasphere FBT
 - Pooling
 - About Fleetscape

Task Balancing

| Tasks | Overdue | High | Medium | Low | Total |
|---|---------|------|--------|-----|-------|
| Vehicle Replacement Follow Up | 2 | 1 | 2 | 8 | 13 |
| Replacement Follow Up | 2 | 1 | 2 | 8 | 13 |
| Vehicle Returns | 73 | 35 | 58 | 174 | 340 |
| File Regional RVIR | 1 | 0 | 0 | 1 | 2 |
| Process Quote | 41 | 25 | 17 | 57 | 140 |
| Process Regional Quote | 30 | 10 | 41 | 105 | 186 |
| Terminate Agreement | 0 | 0 | 0 | 4 | 4 |
| Schedule Regional Sale | 0 | 0 | 0 | 1 | 1 |
| File RVIR | 1 | 0 | 0 | 6 | 7 |
| Quote Authorisation / Acceptance | 47 | 0 | 0 | 81 | 128 |
| L2 Authorise Quote | 9 | 0 | 0 | 3 | 12 |
| Order Vehicle | 3 | 0 | 0 | 12 | 15 |
| Accept Quote | 0 | 0 | 0 | 5 | 5 |
| Validate Quote | 3 | 0 | 0 | 5 | 8 |
| Dispatch Order | 10 | 0 | 0 | 18 | 28 |
| L1 Authorise Quote | 21 | 0 | 0 | 6 | 27 |
| Create Vehicle File | 1 | 0 | 0 | 32 | 33 |
| Quote Exception | 38 | 0 | 0 | 6 | 44 |
| Complete Quote | 38 | 0 | 0 | 6 | 44 |
| Grand Total | 160 | 36 | 60 | 269 | 525 |

| Process | Task | Reference | Assigned to | Status | Due | Actions |
|----------------------------------|---------------------|--|-------------------------|-----------|---------------------|---------|
| Quote Authorisation / Acceptance | Dispatch Order | R-302QGC-358984-420674 | Paul Murphy | Allocated | 08/06/2007 7:05 AM | |
| Quote Authorisation / Acceptance | L1 Authorise Quote | R-821QGP-385410-424310 | Peter John SELLARS | Allocated | 20/03/2007 3:37 PM | |
| Quote Authorisation / Acceptance | L1 Authorise Quote | R-327QGE-373594-427174 | Pat Dull | Allocated | 24/04/2007 1:41 PM | |
| Quote Authorisation / Acceptance | Create Vehicle File | R-047QGS-393986-420536 | Sonja Nagorsen-Mew | Accepted | 10/05/2007 7:59 AM | |
| Quote Authorisation / Acceptance | Dispatch Order | N-40223-430442 | Paul Murphy | Allocated | 30/05/2007 1:54 PM | |
| Quote Authorisation / Acceptance | Dispatch Order | R-546QGO-394255-429814 | Paul Murphy | Allocated | 10/05/2007 11:56 AM | |
| Quote Authorisation / Acceptance | Dispatch Order | R-630QGG-412039-429689 | Paul Murphy | Allocated | 10/05/2007 11:58 AM | |
| Quote Authorisation / Acceptance | Dispatch Order | R-344QGR-391680-429328 | Paul Murphy | Allocated | 09/05/2007 11:16 AM | |
| Quote Authorisation / Acceptance | Create Vehicle File | R-928HPG-412307-431072 | Records Management Team | Grouped | 08/06/2007 3:02 PM | |
| Quote Authorisation / Acceptance | L1 Authorise Quote | R-772QGF-370794-431057 | Robin Barlow | Allocated | 30/05/2007 9:59 AM | |
| Quote Authorisation / Acceptance | Order Vehicle | R-930QGG-412369-430847 | Perry Landamore | Accepted | 29/05/2007 12:24 PM | |
| Quote Authorisation / Acceptance | Dispatch Order | R-408QGG-372363-430938 | Paul Murphy | Allocated | 08/06/2007 7:06 AM | |

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[Complete](#)













- Creating new Vehicle Request: N-41362
- Requiring SES2 vehicle 20000 km annually, Operating in Brisbane

The prices shown below are indicative only.

For a firm quotation on a lease select a lease rate to quote on, and click on the "Quote" button.

Whole of life cost is calculated based on your current vehicle's usage and should be taken as a guide only for budgeting purposes

Matching Vehicles: sorted by 24 month lowest indicative Whole of Life cost, click 12 mth, 24 mth, 36 mth to resort

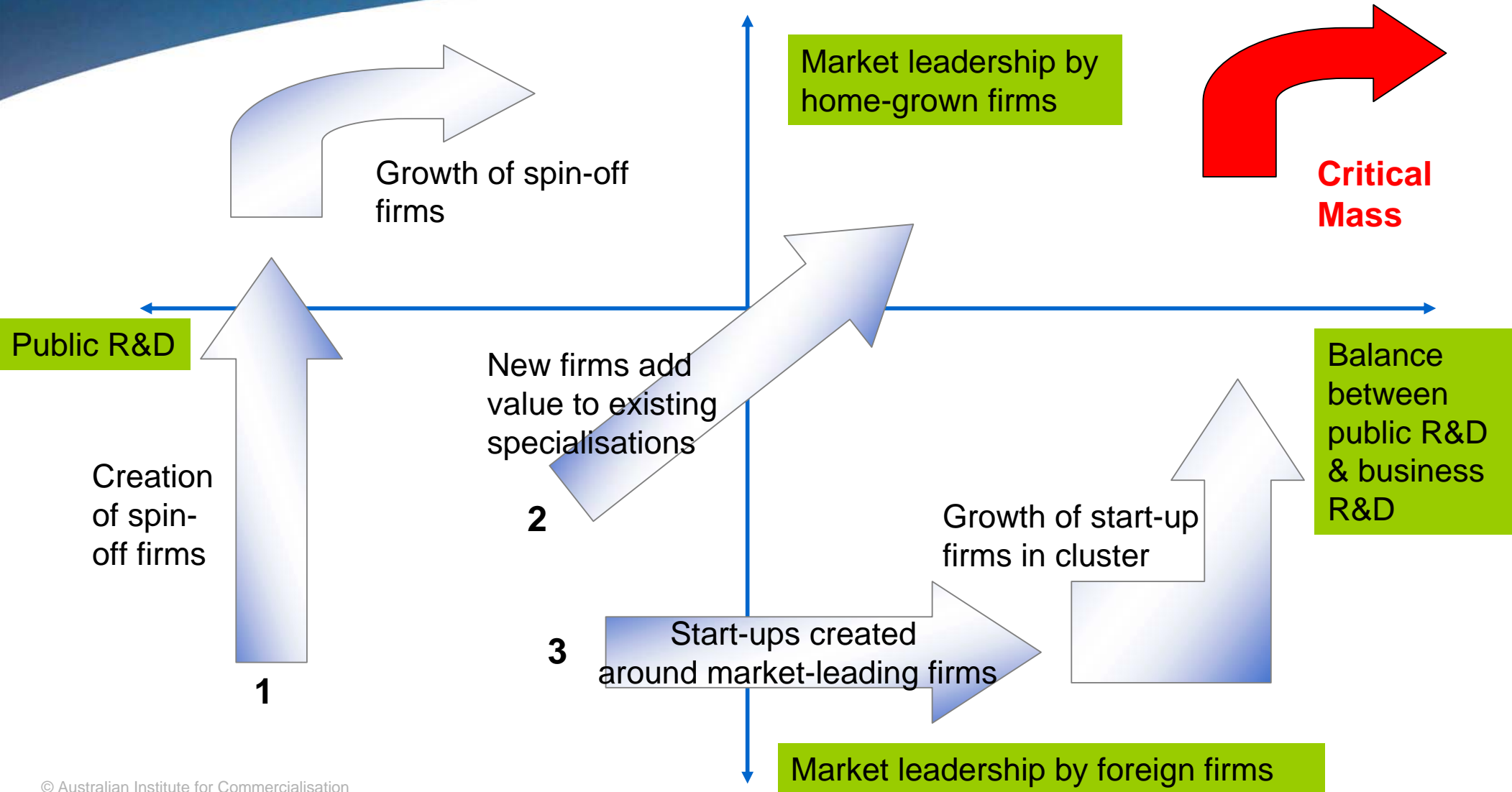
| Hide | Compare | Make | Model | 12 mth | 24 mth | 36 mth | 18 <input type="button" value="v"/> Calc | Costs | | Status |
|--------------------------|---|--|---|-----------------------|----------------------------------|-----------------------|--|----------------------------------|--------------------------------------|--------|
| <input type="checkbox"/> |  | FORD  | FAIRMONT GHIA BF MK2 - 4.0 Auto SEDAN 4Drs Petrol 6 Speed | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="button" value="v"/> | <input type="button" value="Quote"/> | |
| <input type="checkbox"/> |  | TOYOTA  | AURION SPORTIVO ZR6 - 3.5 Auto SEDAN 4Drs Petrol | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="button" value="v"/> | <input type="button" value="Quote"/> | |
| <input type="checkbox"/> |  | HOLDEN  | CALAIS VE - 3.6 Auto SEDAN 4Drs Petrol | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="button" value="v"/> | <input type="button" value="Quote"/> | |
| <input type="checkbox"/> |  | MITSUBISHI  | 380 GT SERIES 2 - 3.8 Auto SEDAN 4Drs Petrol | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="button" value="v"/> | <input type="button" value="Quote"/> | |
| <input type="checkbox"/> |  | HOLDEN  | CALAIS-V VE - 3.6 Auto SEDAN 4Drs Petrol | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="button" value="v"/> | <input type="button" value="Quote"/> | |
| <input type="checkbox"/> |  | TOYOTA  | AURION PRESARA - 3.5 Auto SEDAN 4Drs Petrol | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="button" value="v"/> | <input type="button" value="Quote"/> | |



3. Segmented approach to commercialisation

- Classic approaches to commercialisation include start ups, licencing to existing SMEs, trade sale, divestiture, etc
 - All need different forms of support
- University approach of creating start up companies can produce great returns, but only infrequently
 - Inevitably require venture capital
- Multiple paths exist to market, depending on availability of local receptors and the innovation environment

ideas → opportunities → outcomes



4. Services Innovation

- Many economies are dominated by services companies
- How do financial services, logistics and transport, infrastructure companies innovate?
- Attempt to build iconic status for a region
 - Packaging and brand innovation
 - ‘Methode Tasmanoise’ and Australian wine
- Australian mining industry



AIC policy recommendations (with the Business Council of Australia)

- Recognise that innovation should be a national priority that can drive a third wave of economic reform.
- Strengthen linkages and collaboration between all elements of Australia's innovation system.
- Implement investment measures to strength R&D institutions, and commercialisation.
- Enhance policy focus on education and invest further in human capital.
- Continue micro-economic reform to sustain a favourable business environment for innovation.



Take-home messages

- **Collaboration** (industry – science) is as important as **commercialisation** and frequently the key enabler as well
- A demand-pull approach to research commercialisation (like TechFast) can help SMEs to become more innovative and grow
- Independent innovation intermediaries can solve the problems of information asymmetry and mistrust that may exist between SMEs and the research sector
- SME innovation can be very broad, and require non-technological IP as well as new processes, services and business models.

