

Innovation Funding in New Zealand

1. Introduction/scene setting.
2. Research Methods.
3. HVMS SME experience,
 - application process,
4. Wider funding industry,
 - the funding gap,
 - criteria anomalies,
 - 'state of play',
 - crowd funding.

Innovation Funding in New Zealand

- Based on
 - Sept 2014 draft paper now with Unitec epress for review.
 - Discussions with Callaghan Innovation since July 2014 releasing report.
 - More feedback from RFO, HVMS.
 - Recent changes (August 2014) in funding scene.

Research Context NZ 2012 - 2014

(Successive) Government Policy,

Shift NZ economy to more HVMS / added value.

Latest iteration : Business Growth Agenda.

NZ Government support for innovation / R&D / HVMS,

X4 positive economic externality

entirely R&D co-funding grants (unusual within OECD).

HVMS SME BA5 = not happy

Research time frame – May 2012 – July 2014 . . .

MSI – MBIE – Callaghan Innovation (2013)

Opportunity for change / What is the change?

Method

- Research stance (loosely) “critical realist”
 - “to construct hypotheses about a . . . real domain of . . . generative mechanisms that can produce patterns of events.”
 - Entities (such as mechanisms) may exist without our knowing.
 - All access to the social world is subjective.

Method

- ‘Who got Funded’ MBIE database.
 - All recipients from 2009 – 2012
 - Screened to fit HVMS category
 - Also screened out software/IT dominance.
 - Left in some larger firms to get size comparison.
 - Final list of 200 nationwide.
 - Called by region, in alphabetical order.
 - Auckland / Wellington / Waikato / Christchurch
 - (Who did not get funded = not available.)

HVMS SME sample

(all received funds from MSI in 2009-2012)

Industry	Number	Size range (employee count)
Pharmaceuticals	2	3 - 300
Software	3	5 - 80
Hi Tech manufacturing	3	7- 25
Engineering	3	5 - 40
Niche manufacturing	2	1 - 10
Electronics	1	4

14 semi-structured interviews with CEO or similar

Other agencies sample

Organisation	Number of respondents
Regional Funding Agency Staff	5
Independent funding consultants	2
Venture Capital industry spokesperson	1
Strategic Investment Partners	3
Callaghan Innovation Staff	3

14 semi structured interviews with CEO / Managers / Funding Advisors / Consultants

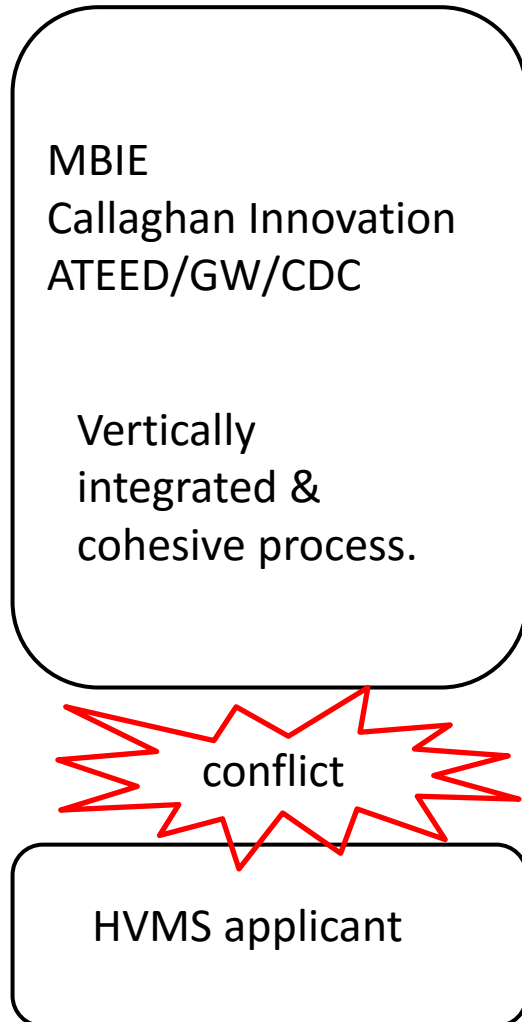
HVMS SME /Govt. findings

(apply to MSI applications – not CI)

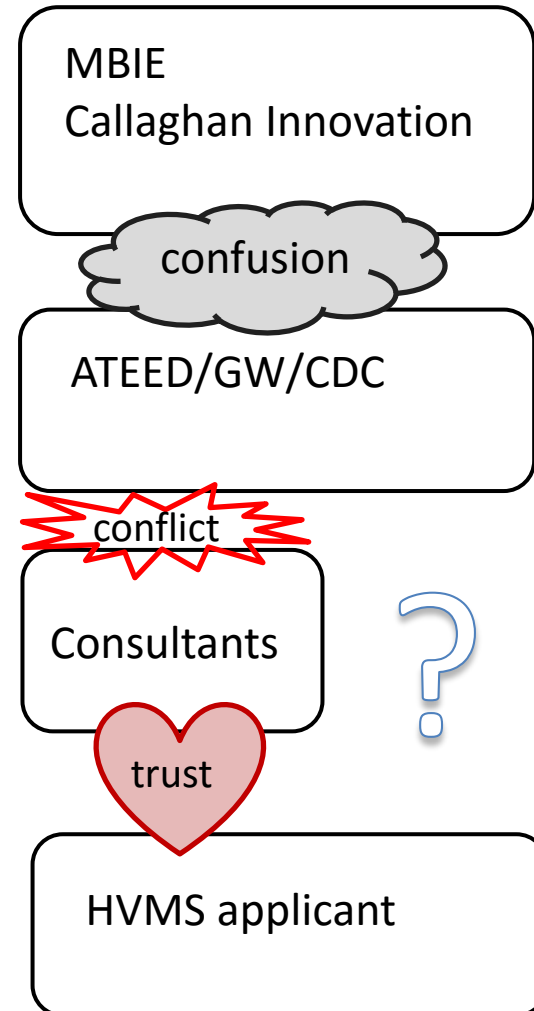
- Difficulty of application,
 - ‘significant obstacle’ to SME / ‘necessary hurdle’ to Govt.
- Role of consultants,
 - necessary to SME / ‘unwanted middlemen’ to Govt.
- SME $\leftarrow \rightarrow$ Govt. relationship,
 - highly variable , depended on individual, not policy.
 - inconsistency of Govt. over time.

Industry Structure

We thought this . . .



We found this . . .



Why so different?

- Perceptions,
 - SME take the application as ‘factual’ (binding)
 - but cannot see the future (= stress).
 - Govt. agencies see it as ‘indicative’ (non-binding)
 - Used to dealing in a dialogue based bureaucracy
- Process,
 - SME want ‘this opportunity’ funded (now)
 - time is money / race to market.
 - Govt. agencies like to build relationships (next time)
 - lack of urgency / qualifying client.

Public-private risk-reward analysis

(conceptual diagram – no data)

Government

HVMS SME

Rewards move this way

+ve externality
(tax revenue, GDP +
employment)

first mover adv.
sales & profits
ROI +
sale offshore

Upside (reward)

Decreases with every \$

Increases with every \$

Upside (reward)

Downside (risk)

no R&D result,
sale offshore,
'picking winners' PR

no R&D result,
Decreases with every \$

Downside (risk)

Increases with every \$

Risks move this way

What is the application process for?

- Government
 - Reduce political / negative PR risk.
 - no serious attempt to measure results.
 - ‘get the money out the door’ = job done.
 - ‘business led’ application process.
- HVMS SME
 - Increase entrepreneurial opportunity.
 - Increase funding for project.
 - Access expertise for project.

One Common Complaint

- The funding gap
 - “no money for product & market development”
 - “no money for capability development”
- NZIAS 38 definitions apply to R&D funding,
 - Research . . . original & planned investigation . . . new scientific or technical knowledge . . .
 - Development . . . application of research findings . . . to plan or design . . . for production of new or . . . improved products before the start of commercial production or use.
 - Commonly expressed as ‘technical stretch’.

Enter Callaghan Innovation

“single front door to the innovation system”

- mission:

“... accelerate the commercialisation of innovation by firms in New Zealand . . .”

“... help businesses turn ideas into internationally marketable products and services more quickly and successfully.”

- Callaghan Innovation is going to be a key player in the Business Growth Agenda.

2013 – a busy year

- February 2013
 - Callaghan Innovation established as crown entity
 - Funding, advice, research (400 IRL staff included)
- August 2013
 - New suite of co-funding products (approx \$150 million)
 - Growth grant / \$300K in R&D for 2 yrs / 20% co-funding
 - Project grant / new to R&D / 30 – 50 % co-funding
 - Various undergrad. & post grad. internships
- October 2013
 - Transition arrangements for applications in place.

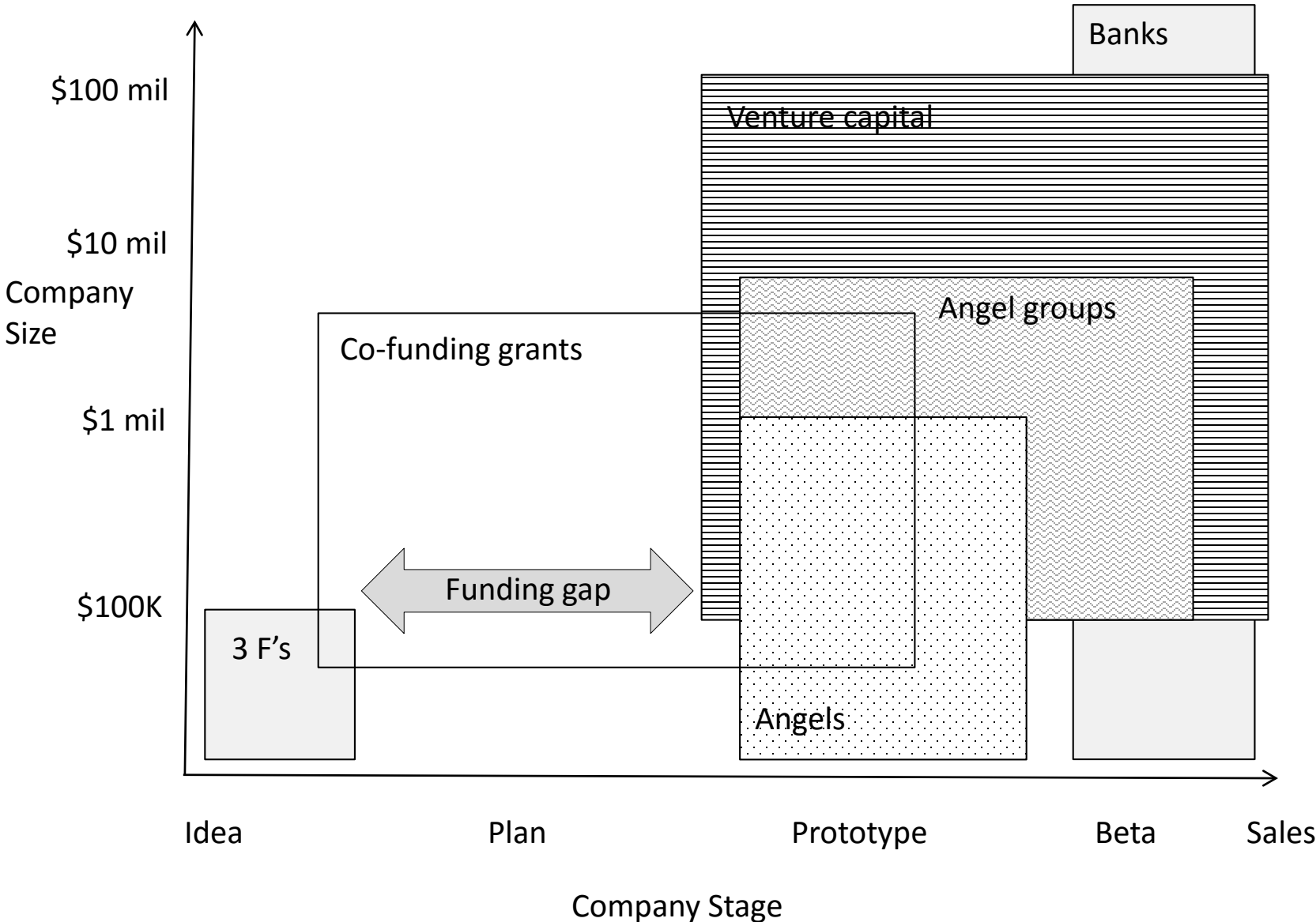
Does CI represent a shift in thinking?

- Too soon to say.
- E.g. funding criteria problem cf PGP.
 - Primary Growth Partnership . . . cover education and skills development, research and development, product development, commercialisation, commercial development and technology transfer. . . . must be anchored in New Zealand, and . . . additional to existing initiatives and work programmes - that is, beyond business as usual.
- Recommendation.
 - Apply similar criteria to business R&D funding.

Focus of R&D remains on products

- Doblin model –
 - types of innovation = 10, product innovation = 1.
- 21st century business success is coming from
 - business model (no funding).
 - new customer engagement strategies (no funding).
- Recommendation.
 - Apply broader (PGP) criteria to business R&D funding.

So where to get funding from?



The funding gap remains

Angels, Angel groups, and VC are looking for,

- high growth business and a five year exit plan.
- ‘elite’ businesses – probably only 5% qualify.
- GFC shadow effect.

NZTE support is too late to have impact.

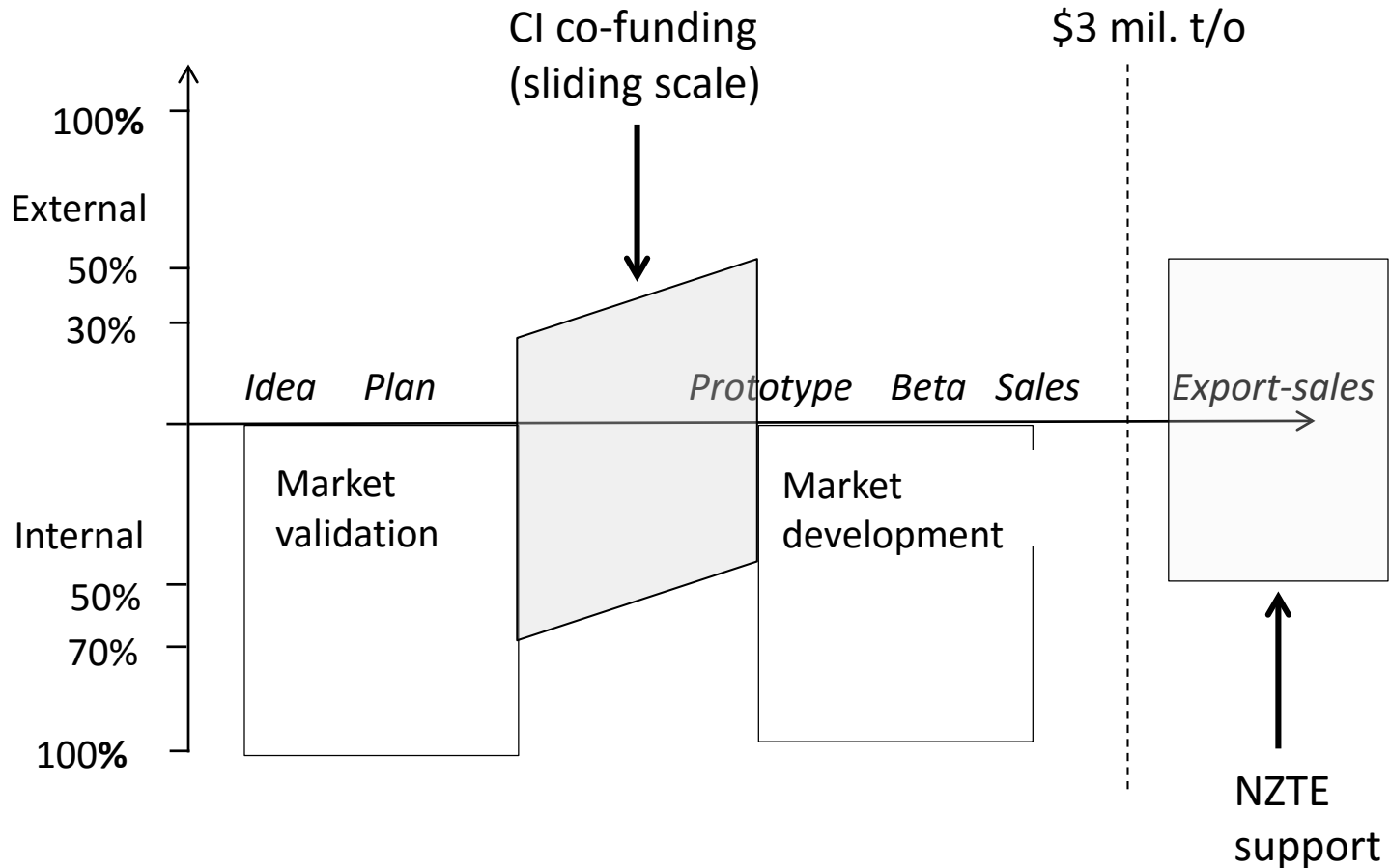
- “come back when you have \$3 million turnover”

Banks are not going to fund ‘potential’.

- HVMS businesses can be slow starters.

A closer look at the funding gap

(shapes are indicative only)



Below the line = cost for business
Above the line = funding assistance

Is marketing important ?

Yes . . and especially for NZ HVMS SME

- tyranny of distance
 - Market research/validation
 - Market development
 - ‘land, be focused, go deep and don’t spread yourself around’.
 - ‘depth of your pockets determines how long you can persist’.

- “crossing the chasm”
 - Technical products reaching mass markets is challenging.

- “prototypes left on the shelf” (widespread comment (?))

State of Play

- Worse (before it gets better?)
 - Callaghan funding now targets 40% , not 50%.
 - uncertainty for applicants has increased.
 - focus remains ‘technical stretch’ & product R&D.
 - funding gap arises from criteria excluding marketing.
 - CI ‘lost’ 400 of 1000 applicants in 2013 process.
- Callaghan Innovation still to get going . . . ?
 - still making key appointments in early 2014.

Crowd funding

New Development : August 2014

- Two licenses given so far by FMA.
- Up to 2 million can be raised as equity.
- Much lower cost of raising capital for business.
 - 135 staff hours (start to finish)
- Risk falls on investor (no prospectus).
- Partnering:
 - Crowd funding matched by angels / VCs / once target is reached
- Power of the crowd ?

- Snowball Effect

- links to the Icehouse /quality assured businesses

Renaissance Breweries

117% / \$700,000 / closed in 60 days /287
investors / average \$2500.

The Patriarch

80% /\$239,000 (goal \$300,000) / 16 days left
/114 investors / average \$2100.

- Pledgeme

- More open to businesses/compliance assured.

- H2Explore (hovercraft supporting cycle tourism in MtCook natl park)

- Goal \$250,000 / two months to go / \$1000 so far / 1 investor / average \$1000.

- Techvana (computer museum)

- Goal \$250,000 – \$750,000 / two months to go / \$3100 so far / 13 pledgers / average \$240.

Will crowdfunding support R&D?

- Renaissance breweries - a microbrewery
- The Patriarch – a movie
 - Both well supported, both mainstream.
- H2Explore – innovative tourism experience
- Techvana – innovative computer museum idea(?)
 - Both struggling for funds, both ‘out there’.
- The crowd (by definition) is not the cutting edge.

Will crowdfunding support marketing ?

