Open Innovation

Monash Business Breakfast – Wednesday 27 March 2013

Industry Engagement & Commercialisation and the John Monash Innovation Institute
OPEN INNOVATION

Presented by Dr John Kapeleris
General Manager – Australian Institute for Commercialisation
March 2013
Agenda

- Definition of Open Innovation
- The Concept of Open Innovation
- The Problem – Low Level of Collaboration
- Collaboration – Co-creation of Value
- Types of Collaboration
- Goldcorp – Open Innovation Case Study
- Conclusion
Open Innovation

Definition:

- Open innovation is the process by which organisations use both internal and external knowledge to drive and accelerate their internal innovation strategy in order to fulfil existing market needs or to access new market opportunities.

- The concept of open innovation implies that an organisation has the willingness and desire to source and utilize external knowledge, ideas, intellectual assets and technologies, in addition to its internal capabilities, to identify solutions to problems, capitalise on opportunities, develop new technologies, create new products and services, improve processes, or design new organisational systems and business models.
Concept of Open Innovation

- **Internal technology base**
- **External technology base**
- **Internal/external venture handling**
- **License, spin out, trade sale**
- **Other firm’s market**
- **Our new market**

Source: Prof Henry Chesbrough UC Berkeley, Open Innovation: Renewing Growth from Industrial R&D, 10th Annual Innovation Convergence, Minneapolis Sept 27, 2004
Australia’s Problem – Low Level of Collaboration

Collaboration Co-creation of Value

Shared destiny: Creating new competitive space

Shared work and co-development

Collaboration with suppliers, key customers and supply chain

Pre-requisites for collaboration

Sharing and creating knowledge (tacit and explicit)

Sharing information (transaction data)

Arm’s length relationship

Collaboration intensity

Traditional business approaches

Market-based, transaction driven, across unit boundaries

Improve business processes, across legal boundaries

Joint product development, joint account management

Shared goals and resource leverage

QMISOLUTIONS
Types of Collaboration

Why Open Up?

Overcome Threats
- Rapid pace of technical change
- Business models trump technology
- Rapid depreciation of IPR
- Integrate innovations
- More technology per product
- Growth in knowledge base
- Globalisation

Capitalise Opportunities
- Leverage in-house knowledge
- Access specialist equipment & know how
- Gain critical mass
- Global reach
- Benefits for dynamic SME’s
- Create value – economic, social and environmental
Thank you

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GHD Case Study
Open Innovation: How open is enough?

Jeremy Stone | Group Manager, Innovation
Monash Business Breakfast - 27th March 2013
Overview GHD

GHD at-a-glance

- Leading engineering, architecture and environmental consulting company
- Operating in 5 continents
- 100+ offices worldwide
- 80+ years in operation
- 6,500+ people
- 2011 revenue: AUD 1,002 million
- Serving 5 global markets
- 70+ service lines
Innovation – Our 3 Focus Areas
Within GHD - The Zone
On projects - PIVOT

Mock up only

Transform ideas to innovation efficiently

Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Lessons learnt

• Relevance
• Simplicity
• Perseverance
• Values/Culture
• Teamwork
• Reward and recognition

• Vision/Call to arms
• Targets/Focus
• Training
• On-line/Off-line
• Integrity
• Risk
10 miniFAB™
Celebrating 10 years of delivering solutions
CONNECTING
Building Trust
Connecting
Understand Motivations and Constraints
CONNECTING
Do not Assume Rules for Engagement
Do not assume similar to your university days ...
... but not as commercial as you might expect.
CONNECTING

Not all about the $ or the IP
CONNECTING
Discuss with your favourite Academic
CONNECTING

Multiple Options
Example
Facilities and Infrastructure
Resources

www.monash.edu.au/research/infrastructure/platforms
Open Innovation
A Monash perspective

Dr Heather St John
Director of Industry Engagement
27 March 2013
What Does Open Innovation mean for Monash?
What Does Open Innovation mean for Monash?

27 March 2013
Monash Innovation Breakfast
What Does Open Innovation mean for Monash?
What Does Open Innovation mean for Monash?

Industry, Business, Government, Community

Relevance

Education

Research

Excellence

Industry, Business, Government, Community

Impact
Connections & Ideas Flow

Internships
Consultancy
Access to services and facilities
Research contracts
Research collaborations
Co-operative Research Centres
Industry-focussed short courses

Industry advisors & boards
Guest speakers
Alumni
Networks
Facilitating B2B collaboration & industry research clusters (JMII)
Monash is experienced in working with industry

- Monash does more contract research with Australian industry & business than any other Uni
- Over 50% growth over 2009 - 2011
Innovative Partnerships
GlaxoSmithKline

- The Australian Pharmaceutical Centre for Innovation and Industrialisation
- Linking staff at the Monash Institute for Pharmaceutical Sciences (MIPS) and production specialists at GSK’s Boronia plant.

Successes:
- The plant was saved from possible closure
- The R&D alliance has reduced the risk of failure in new products
- $4 million -> unique industrialisation facility for developing new products.

“The relationship [with the GSK team] is very important to me because it gives me access to those people who actually own real problems,” David Morton says. “And those real problems are often more interesting and challenging than the perceived problems people within academic circles get to see. We can direct our research to have high impact.”
- Worksafe Victoria, The Transport Accident Commission and Monash
- Collaborative research model - consultation with a range of stakeholders.

Research programs include:

- Occupational Health and Safety
- Return to Work and Recovery
- Health and Disability Services
- Compensation Systems
- Research Translation
- Neurotrauma.
### Examples of Impact:

**725K investment in research delivers >$10M ROI**

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<tr>
<th>CASE STUDY</th>
<th>INVESTMENT</th>
<th>RETURN</th>
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<td>Noise Induced Hearing Loss</td>
<td>$312,000</td>
<td>- $1.5 million actuarial release</td>
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<td>- Allowed WorkSafe to focus its strategic response to growing hearing loss costs</td>
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<td>Quad bike Safety Devices</td>
<td>$10,500</td>
<td>- Re-ignited public debate around important workplace safety issue</td>
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<td>- Contributed to a 'case for change' in safety standards</td>
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<td>- Contributed to community behavioural change</td>
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<td>Client Perceptions of Recovery</td>
<td>$37,700</td>
<td>- Enhanced understanding of TAC role in improving client experience</td>
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<td>- Provided information for the education of claims officers</td>
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<td>- Provided opportunity for key researcher to engage with TAC</td>
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<td>- Contributed to capacity building in research team at Monash</td>
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<td>Implantable Pain Therapies</td>
<td>$73,400</td>
<td>- $1.8 million in costs avoided consisting of $0.65m in costs saved over 3 years to June 2012 and $1.16 million in future costs avoided.</td>
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<td>- Contributed to change in culture towards evidence based decision making</td>
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<td>- Helped WorkSafe to contain a potential &quot;cost-blowout&quot;</td>
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<td>- Leant credibility of WorkSafe policy of reviewing IPT requests</td>
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The collaboration is developing a direct to brain bionic eye system for people with vision impairment.

Monash computer scientists, engineers, medical researchers & industry partners.
Critical Pipes

- Advanced Condition Assessment and Pipe Failure Prediction Project
- A collaboration of researchers and water utilities from around the globe dedicated to solving failures in critical pipelines.

1. How, when and where will pipes fail within the entire network?
2. How do we assess the condition of the pipe cost effectively?
3. How do we calculate pipe deterioration rates accurately with respect to the pipe environment?
Critical Pipes:  
An international outcome-focussed collaboration
Internships

Benefits:

**Intern**
- experience and career opportunities

**Company**
- Bright young mind bringing in latest thinking to address a specific company challenge
- an ‘entrée’ into relevant research expertise

**Monash**
- better understanding of industry needs
- opportunity to establish a longer term relationship
Arrangements tailored to your needs
Research that is affordable

- A variety of Commonwealth and State schemes, eg
  - ARC Linkage
  - Industrial Transformation Research Program
  - Researchers in Business Scheme
  - Technology Voucher Program
  - Innovation Voucher Program
  - Digital Futures Fund
  - Clean Technology Innovation Program
  - & many more!

- R&D tax incentive
We strive to:

- Provide an easy interface to a breadth of research expertise
- Listen to our partners needs & drivers, and be solution-focussed
- Be easy to do business with (flexible with IP)
- Add value to the organisations we work with
- Be responsive & responsible
- Be a trusted partner
- Build long-term relationships
- Deliver greater impact through our partners’ success