Marketing tech transfer opportunities

Natalie Chapman
Managing Director, gemaker
BSc(hons) MCom (Marketing), MBA

gemaker
TAKING **NEW IDEAS** TO MARKET

What is

Marketing is…

- *'Marketing is the management process involved in identifying, anticipating and satisfying customer wants profitably.'* (Institute of Marketing)
- Marketing is not just selling. it is about knowing and understanding your customer
- *'The aim of marketing is to make selling superfluous. The aim is to know and understand the customer so well that the product or service sells itself.'* (Peter Drucker)

http://www.slideshare.net/loxenham/what-is-marketing-presentation-615595

http://www.whatismarketingconcept.com/what-is-marketing-kotlers-definition/

The "Four Ps" of Marketing

- **Product:** the science/technology and the value it brings to the company (licensee)
- **Promotion:** how the company finds out about the science/technology
- **Place:** where the marketing of the technology takes place (or who does the marketing)
- **Price:** the value as seen through the eyes of the company

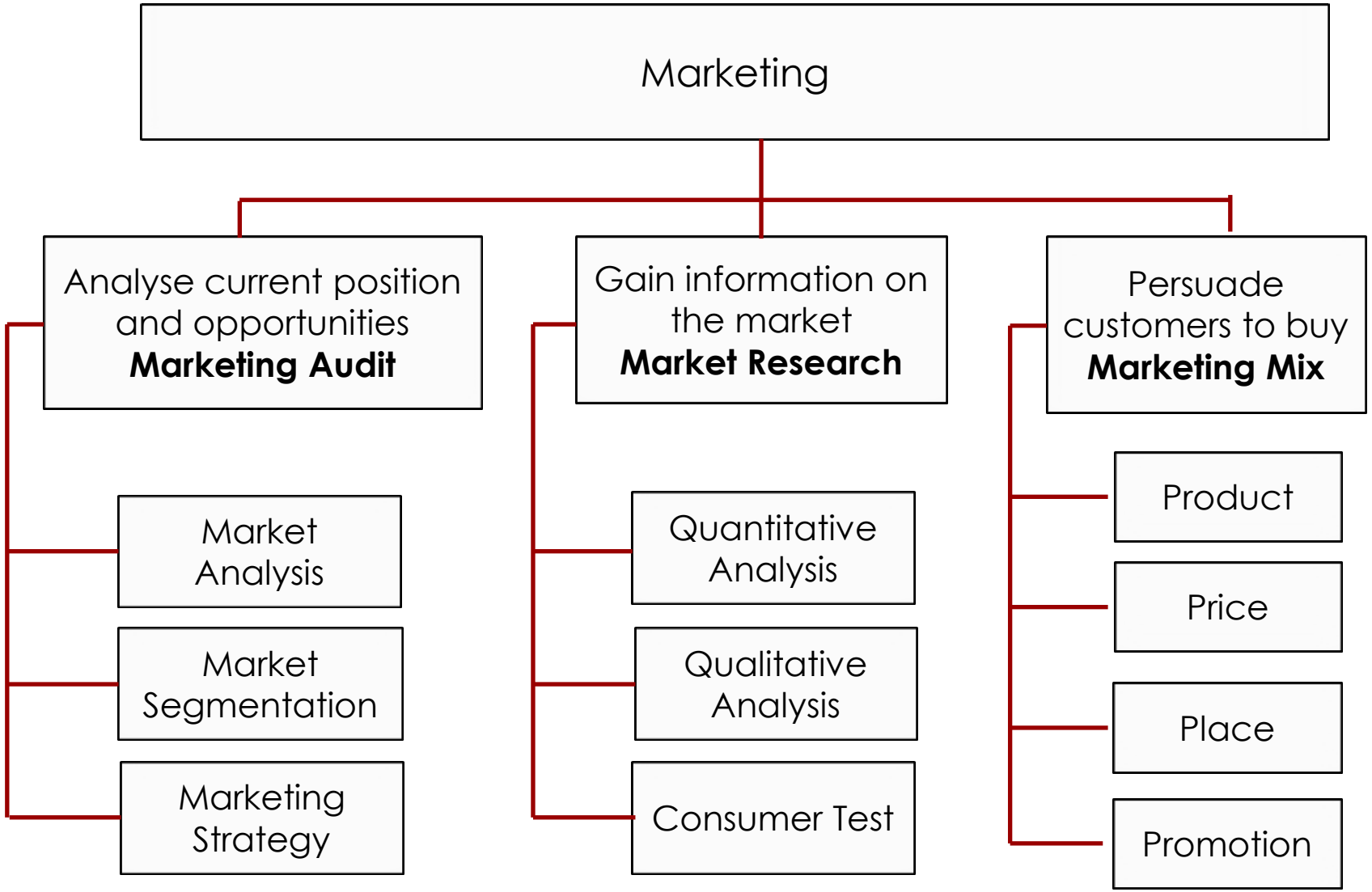
Estimating customer value for your technology

"What is the cost to the customer if they don't buy?"

X Not how much it cost you to create and prove the technology.

Money?	What does cost to do now?
	How much will you save your customer?
$	Cost of transferring technology
	What does it replace?
	What will cost to replace?
Time?	More efficient?
	More product in shorter time?
	Development time shorter?
Resources?	Waste?
	Equipment?
	Space?
	People?
	Patents?

A FLEXIBLE TEAM OF COMMERCIALLY SAVVY GEEKS



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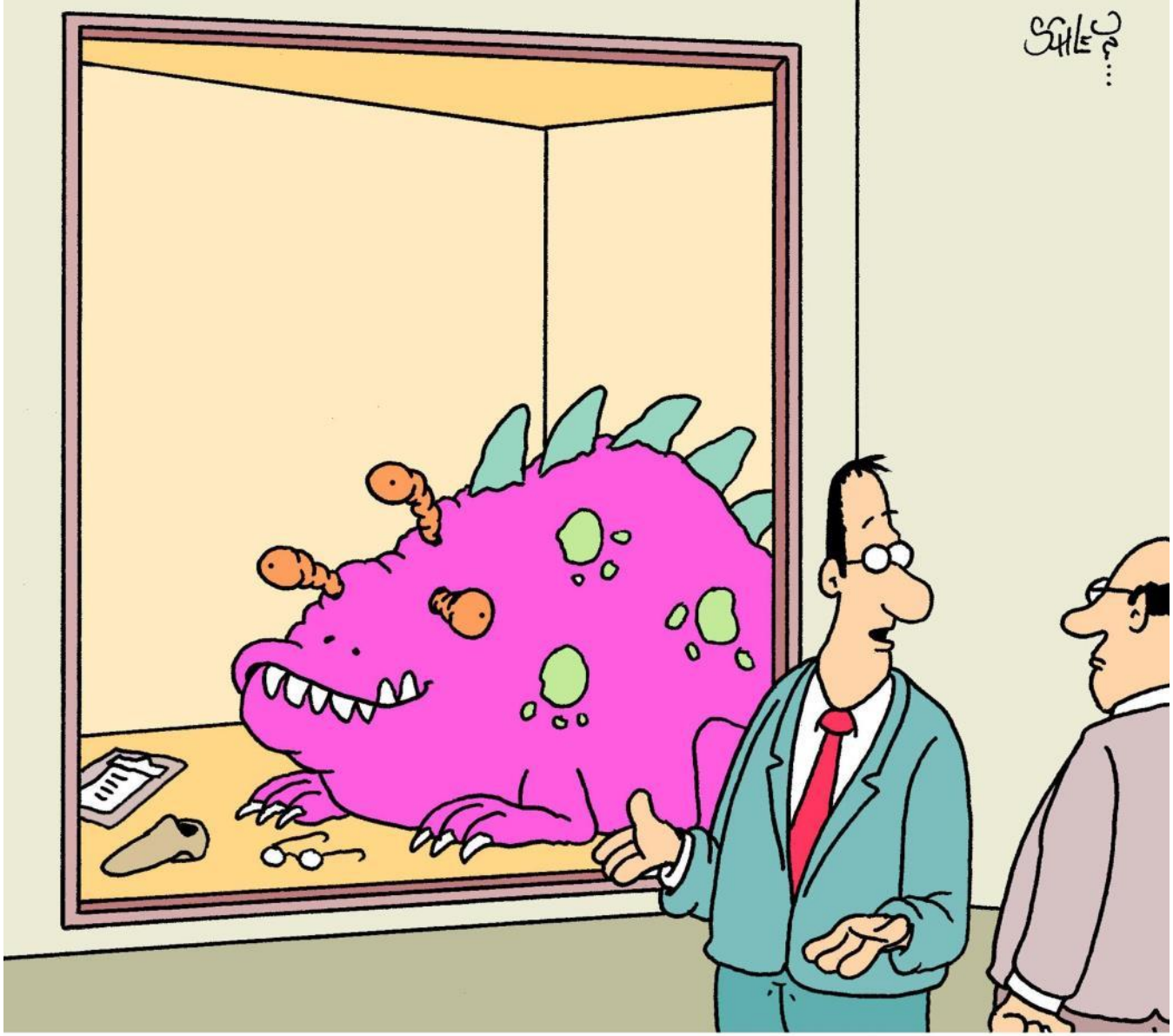
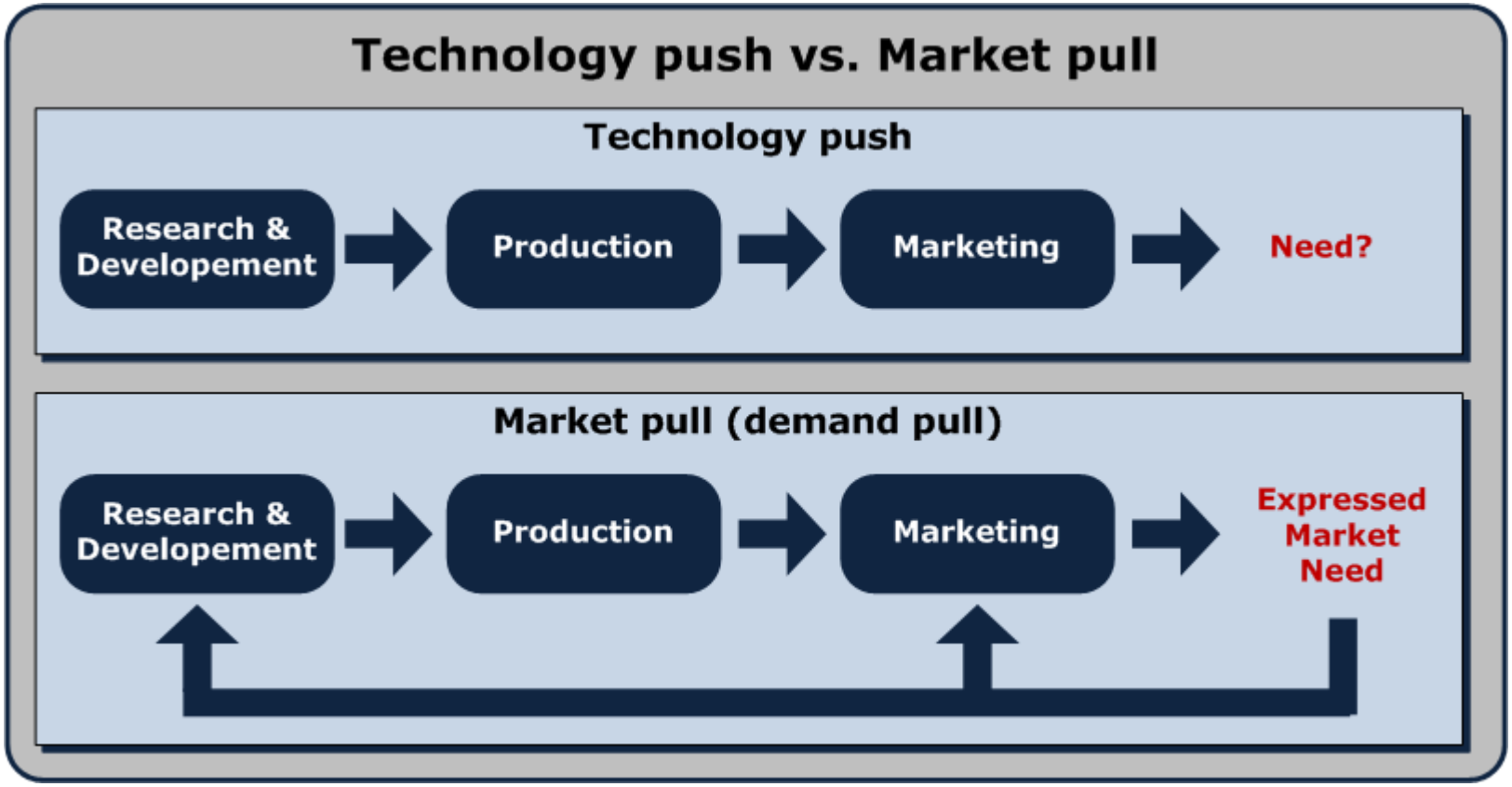


"WELL, THE RESEARCH GUYS MADE A FANTASTIC BREAKTHROUGH. NOW IT'S ON YOU MARKETING FOLKS TO FIND OUT HOW TO SELL IT."

Technology push vs technology pull



By Grochim - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=5747025

Good Technology Commercialisation

Technical and business specialists work together along the whole process

Technology Commercialisation

	Validation of Idea	Protection of IP	Product & mkt development	Product/business Sale
Business Development	• Record disclosure of invention • Conduct market research and analysis	• Assist with filing patent application	• Obtain market feedback on invention • Prepare a marketing strategy and plan • Identify financers & pitch	• Execute commercial plans • Sell/licence product or business
Technical Specialists	• Generate new ideas • Conduct prior art search • Validation of ideas with initial experiments • Record all work in lab book • Disclose invention	• Complete patent application	• Develop product • Validate patent application claims	• Complete product for sale • Continue work on the next generation of products

Marketing has a role at all stages of invention

ANSTO Innovations

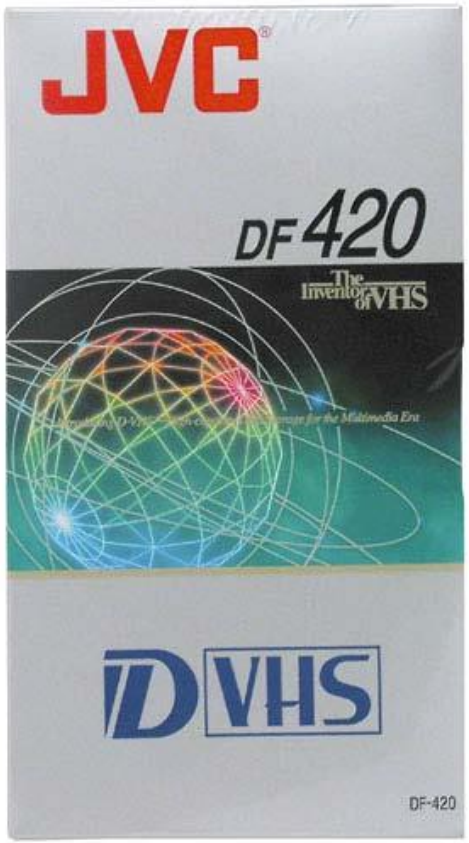
	Idea	Disclosure	Peer review	Assessment	Protection	Develop/Commercial
ANSTO Business Development		Lead the invention disclosure meeting and record details of invention/mkt etc	Convenes a monthly meeting for presentation of new ideas and provides business/marketing/IP advice	Provides preliminary market intelligence or technology assessment for invention	Provide IP support if required. Manage ANSTO's patent portfolio.	Manages development projects Prepares development and commercial plans with the inventor that include milestones, market research and business development. Takes invention to market or outsources to 3rd party.
Inventor	Inventor has an idea Completes a prior art search Scopes idea, tests it	Inventor notifies ANSTO Business Development of invention. Completes the form and attends disclosure meeting.	Presents idea to Peer Review Meeting – Outlining invention and what is required to develop it to a saleable product.	Assists by providing information as required.	Inventor completes patent application and files application with patent attorneys	Assists by providing information as required. Begins product development of invention.
Institute/Bus Unit/Division	Inventor's supervisor or close co-workers may provide some feedback to idea for validity.	The Invention disclosure form is sent to their GM/Head for their approval if core to ANSTO to progress for development.	Supports inventor and provides experts within the field for the invention			
Legal		IP/commercial legal advisor attends to provide legal advice	Provides legal and IP advice at the meeting	Prepares NDA for 3rd party providers in assessment of invention		Provides MTA and NDA Agreements and Licencing etc Agreements as required
Library		Librarian attends to scope work required for a full literature search on the disclosed invention.	Comments on the results of the prior art search and provides advice	Conducts thorough prior art searches for inventions prior to patent		

Marketing Misconception #1

Misconception: "This technology is so good – it will sell itself.

There's no need to do any marketing."

Technological superiority vs customer need

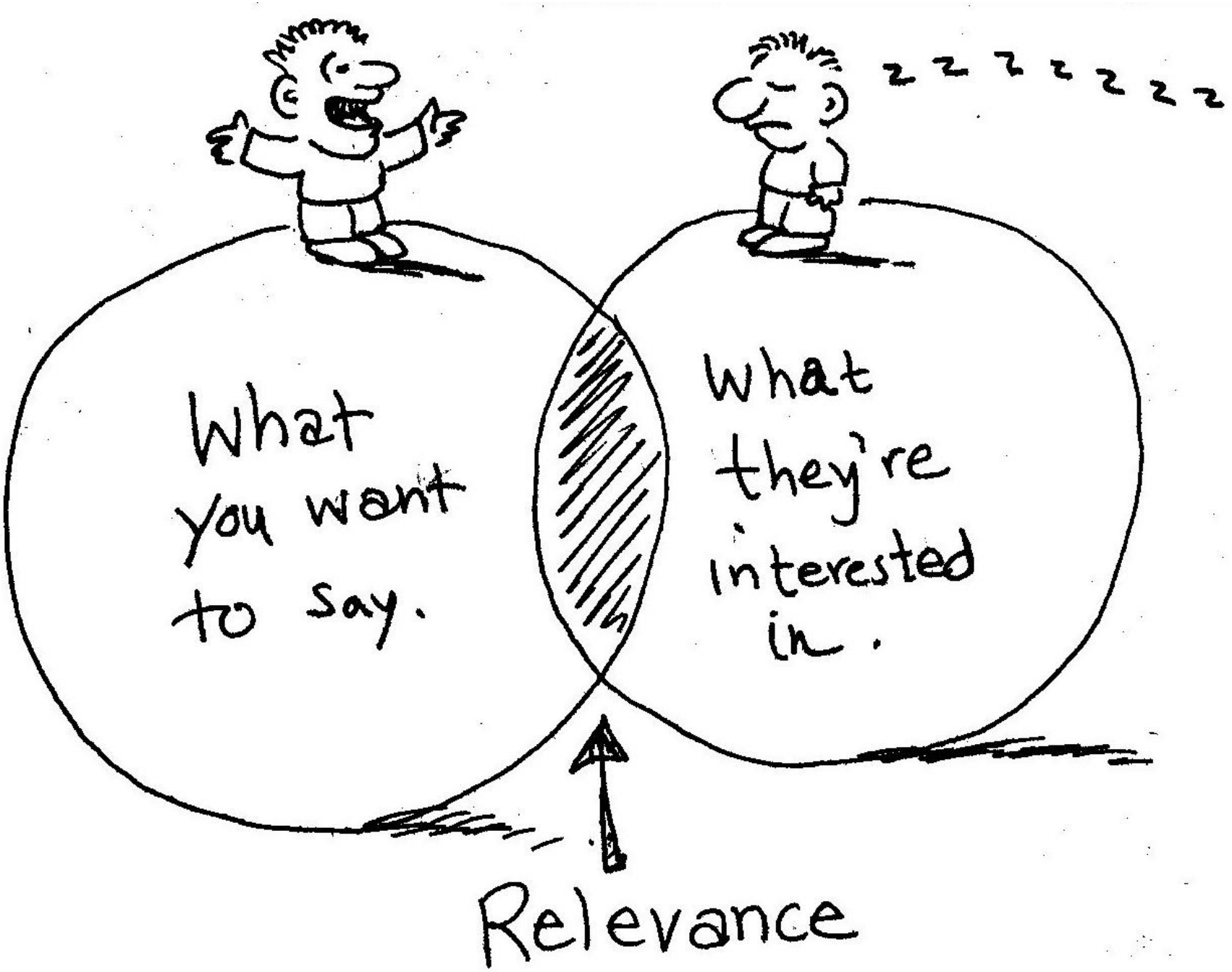


Marketing Misconception #2

WE DO NOT NEED TO GET SOMEONE IN TO HELP US WITH MARKETING OUR CHURCH AS WE ARE PERFECTLY ABLE TO DO IT OURSELVES

Commercialisation Managers should

- have good written and verbal communications
- be customer-oriented experts who will get to deeply understand the industry customers
- know best routes to market
- know who really is the customer rather than who is assumed to be the customer
- look at the business proposition from different viewpoints and find new markets



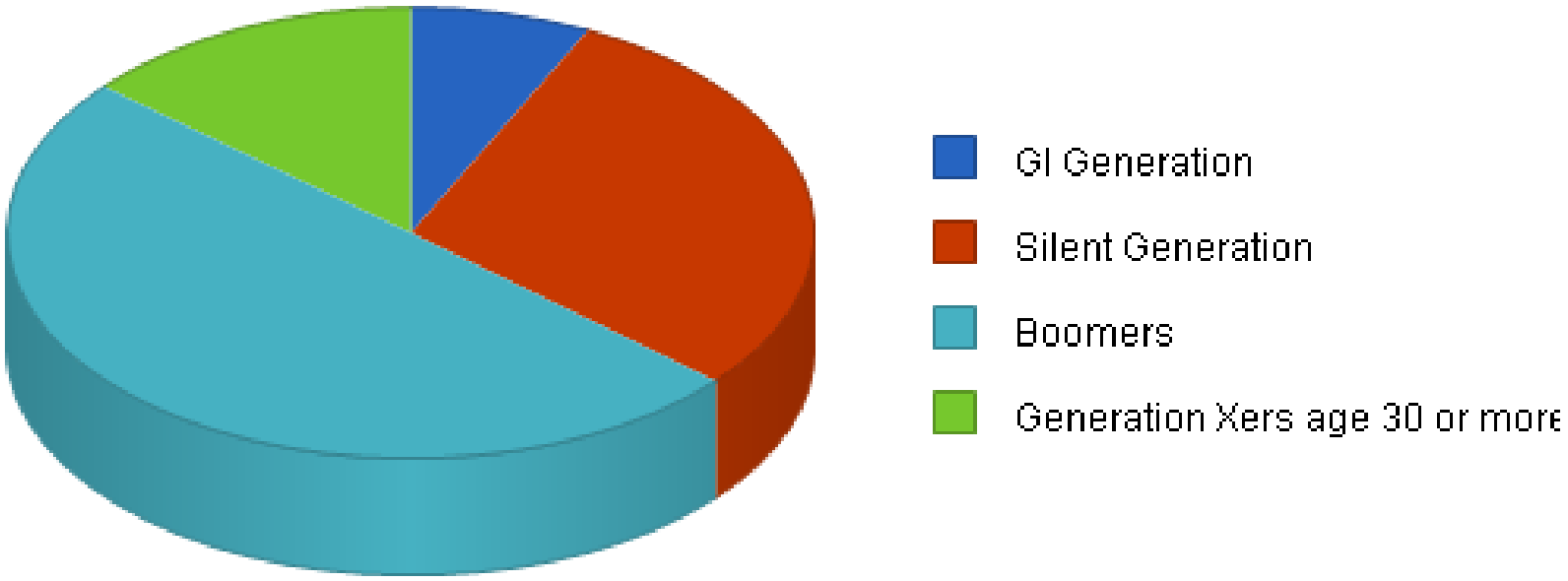
http://www.parachutedigitalmarketing.com.au/why-choose-parachute-digital/our-approach/content-marketing/

Marketing Misconception #3

- *Misconception: Everyone is my customer.*

https://www.centralengland.coop/funeral-services/funeral-products-and-services/coffins-and-caskets/traditional-coffins

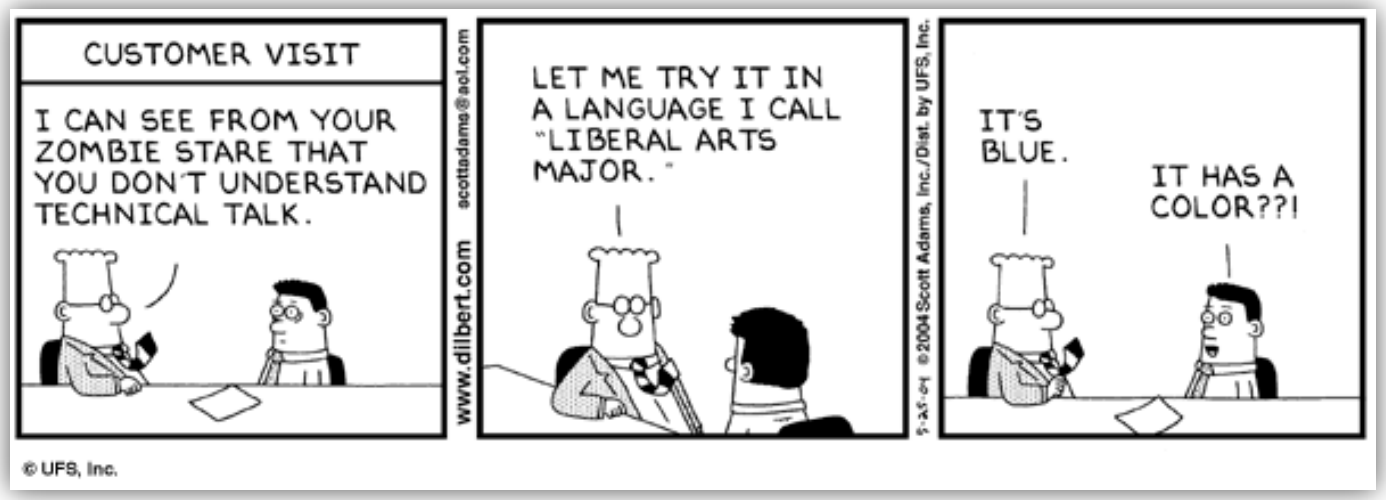
The real customer is…



http://www.bplans.com/funeral_home_business_plan/market_analysis_summary_fc.php

Marketing Misconception #4

- *Misconception:* "It doesn't matter if the technology description is too technical, the person who is going to be interested in licensing this technology will be able to understand it."



Misconception #4

- Held by many technology transfer professionals
- Most technology descriptions will not get read in full
- Important to recognize the following:
  - Often the person looking for the technology does not have a science background
  - Even if they have a science background, business people are looking for the "Value Proposition"
  - Need to make it easy for them to identify value proposition and communicate it to other members of the team

Methods & Compositions for Preparing Protein Processing Enzymes

The present invention relates to a new protein, convertin I, which belongs to a family of mammalian convertase proteins characterized by partial amino acid sequence homology to each of the following: the precursor processing endoprotease of yeast KEX2, bacterial subtilisins, and the human fur gene product, furin. The protein which is a subject of this invention is further characterized as a mammalian convertase, which is capable of hydrolytically cleaving, for example, prohormones to yield active hormones. Specifically, convertin I is capable of cleaving peptide bonds following certain sequences of two adjacent basic amino acids. Convertin I has a molecular weight of approximately 70 kDa by electrophoresis. Another aspect of this invention is a recombinant vector, incorporating the coding sequences which are the objects of this invention. Methods of preparing the endoprotease protein, including molecular engineering methods are described. This invention also relates to a nucleic acid segment, including DNA and a cDNA having a sequence coding for convertin I. Methods of detection of said protein by, for example, fluorescent antibodies, and use of its coding sequences as hybridization probes are also provided.

Birefringence Grating Polarizing Beam Splitter

A birefringence polarizing beam-splitter is provided. A series or periodic blazed grooves or grooves with echelon profile having a number of steps is provided on the surface of an optically birefringent material. The birefringent substrate material may be crystalline or plastic. In another embodiment, two substrates of birefringment material having a series of periodic blazed grooves or grooves with echelon profile are combined to achieve greater angle of beam splitting.

MACQUARIE University

Enhancing upconversion luminescence in rare-earth doped particles

Application Number: 2013315274 View patent filing (AusPat)

Available

About this Patent

Biosensing needs a photo-stable bright and background-free biolabels. This invention essentially breaks through the concentration quenching in upconversion nanocrystals.

Technology Field(s)

- Instruments → Optics

Interested in Licensing or Collaboration?

Contact Patent Holder

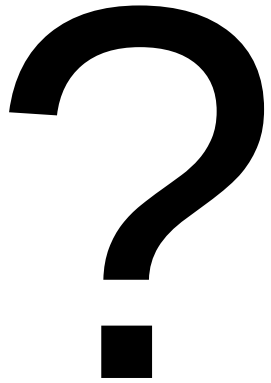
Bibliographic Details

- Invention Title: Enhancing upconversion luminescence in rare-earth doped particles
- Applicant(s): Macquarie University
- Inventor(s): Jin, Dayong,Zhao, Jiangbo
- Filing: 2013
- Effective: 2013
- Expiry: 2033

Please note that Source IP does not undertake a search of all known patents. To review an authoritative source of Australian patents please refer to IP Australia's AusPat service.

Answer the following

- Can you answer the questions,
  - What is it?
  - What does it do?
  - How does it do it?
  - What value is it? To whom?
  - Why would I licence/buy it?
- Are you compelled to read further?
- Is there really any value in posting these titles and descriptions to the web?



Titles: Your turn

- Think about one of your favorite technologies
- Create a Title:
  - Is it clear and concise?
  - Does the title answer the question: What is it?
- Volunteers to share examples??

Web Challenge

- Review descriptions posted to your website
- Can you identify the value proposition?
- Keep in mind: If you can't, how can potential licensees?

Features/Benefits

- Create Feature/Benefit statements:
  - Describe unique features of the technology that solves potential licensee's problem or satisfies their need
  - Explain why your potential licensee would care about this feature – associated benefit
  - Unique aspects are those not currently offered by other technologies or products

Benefits Are What Sell

- Features don't sell, *benefits* do
- Features don't automatically communicate associated benefits
  - Our unique sensor can detect ppm levels of NO in % levels of O_2

Compared to

  - The sensors are highly sensitive to specific gases, providing accurate and in-depth diagnostics of pollutants

WESTERN SYDNEY UNIVERSITY

Braincubator™ - A device for storing tissue samples

Application Number: WO2015021513 View patent filing (WIPO)

Available

About this Patent

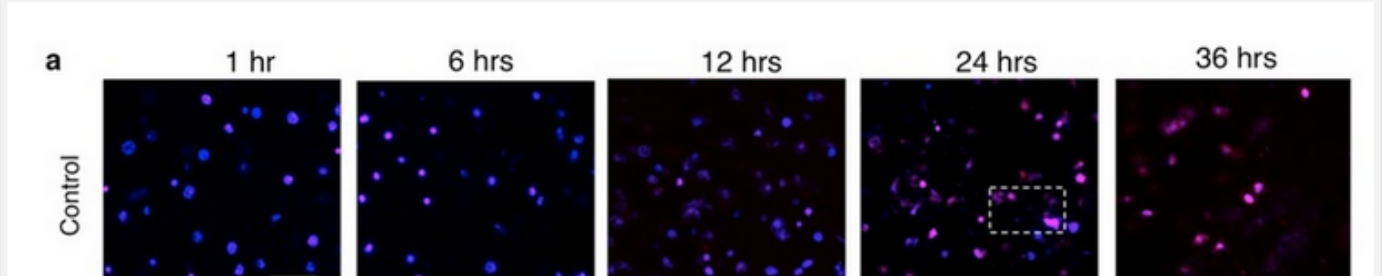
Neuroscientists use brain slices to simplify brain research. The short six to eight hours lifespan of brain slices is a major concern, as it limits the time available to study the neuronal properties in the slice.

Researchers at the Western Sydney University have invented a system, which can keep brain slices viable for research for 36 hours and longer. The tissue sample is housed in a storage chamber, and the device has a control system to regulate environmental conditions including temperature, oxygenation and/or pH in the chamber. The device also includes an antimicrobial system.

The figure shows the increased fraction of live cells against time using the Braincubator™ device compared to a control device. Key advantages include:
- Significantly enhanced standardisation via control of temperature, pH and Oxygen levels
- New opportunities to study long-term effects on brain tissue, such as studies of neuronal metabolism and pharmacological dynamics
- Simplified animal ethics from using fewer animals to get the same quality and quantity of research

Technology Field(s)

- Chemistry → Biotechnology

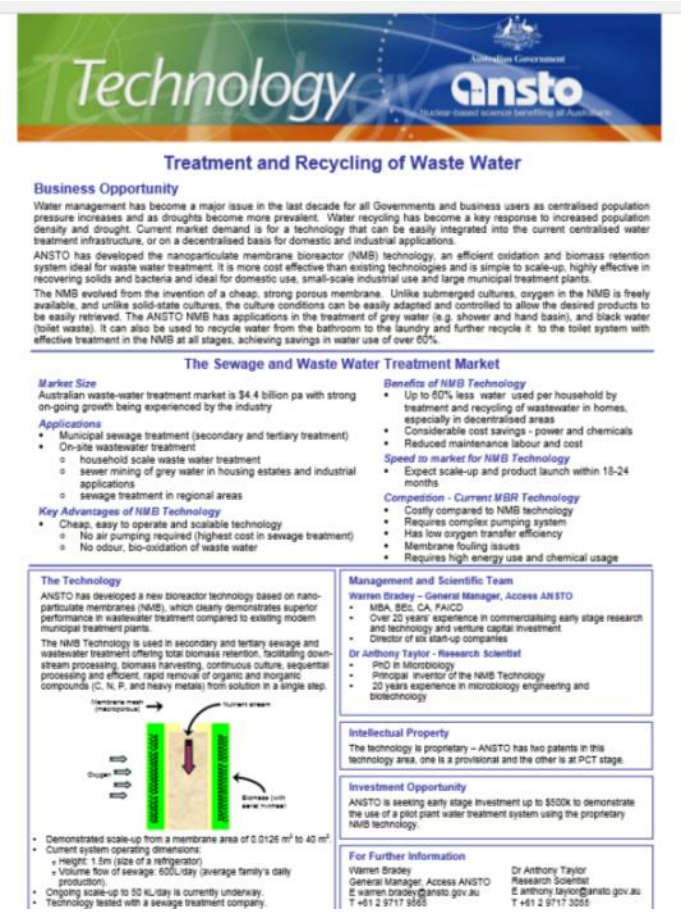


Getting Started

- Think about one of your favorite technologies
- Who is your most likely licensee?
  - What are their problems/needs/interests?
- How does your technology solve those problems/needs?
- What is your competitive advantage?
- What UNIQUE feature(s) of your technology provide those benefits? Ie provide a value proposition

Technology Description Outline

- Title
- Technology Overview
  - Gain attention
  - Identify the value proposition
  - Establish credibility
- Application(s)
- Competitive Advantage
  - UNIQUE features and benefits
- Technology Description
- Brief inventor bios
- Stage of development? – depends!



Technology

ansto

Treatment and Recycling of Waste Water

Business Opportunity

Water management has become a major issue in the last decade for all Governments and business users as centralised population pressure increases and as droughts become more prevalent. Water recycling has become a key response to increased population density and drought. Current market demand is for a technology that can be easily integrated into the current centralised water treatment infrastructure, or on a decentralised basis for domestic and industrial applications.

ANSTO has developed the nanoparticulate membrane bioreactor (NMB) technology, an efficient oxidation and biomass retention system ideal for waste water treatment. It is more cost effective than existing technologies and is simple to scale-up, highly effective in recovering solids and bacteria and ideal for domestic use, small-scale industrial use and large municipal treatment plants.

The NMB evolved from the invention of a cheap, strong porous membrane. Unlike submerged cultures, oxygen in the NMB is freely available, and unlike solid-state cultures, the culture conditions can be easily adapted and controlled to allow the desired products to be easily retrieved. The ANSTO NMB has applications in the treatment of grey water (e.g. shower and hand basin), and black water (toilet waste). It can also be used to recycle water from the bathroom to the laundry and further recycle it to the toilet system with effective treatment in the NMB at all stages, achieving savings in water use of over 60%.

The Sewage and Waste Water Treatment Market

Market Size
Australian waste-water treatment market is $4.4 billion pa with strong on-going growth being experienced by the industry

Applications
- Municipal sewage treatment (secondary and tertiary treatment)
- On-site wastewater treatment
  - household scale waste water treatment
  - sewer mining of grey water in housing estates and industrial applications
  - sewage treatment in regional areas

Key Advantages of NMB Technology
- Cheap, easy to operate and scalable technology
  - No air pumping required (highest cost in sewage treatment)
  - No odour, bio-oxidation of waste water

Benefits of NMB Technology
- Up to 60% less water used per household by treatment and recycling of wastewater in homes, especially in decentralised areas
- Considerable cost savings - power and chemicals
- Reduced maintenance labour and cost

Speed to market for NMB Technology
- Expect scale-up and product launch within 18-24 months

Competition - Current MBR Technology
- Costly compared to NMB technology
- Requires complex pumping system
- Has low oxygen transfer efficiency
- Membrane fouling issues
- Requires high energy use and chemical usage

The Technology

ANSTO has developed a new bioreactor technology based on nano-particulate membranes (NMB), which clearly demonstrates superior performance in wastewater treatment compared to existing modern municipal treatment plants.

The NMB Technology is used in secondary and tertiary sewage and wastewater treatment offering total biomass retention, facilitating down-stream processing, biomass harvesting, continuous culture, sequential processing and efficient, rapid removal of organic and inorganic compounds (C, N, P, and heavy metals) from solution in a single step.

- Demonstrated scale-up from a membrane area of 0.0126 m² to 40 m².
- Current system operating dimensions:
  - Height: 1.5m (size of a refrigerator)
  - Volume flow of sewage: 600L/day (average family's daily production).
- Ongoing scale-up to 50 kL/day is currently underway.
- Technology tested with a sewage treatment company.

Management and Scientific Team

Warren Bradey – General Manager, Access ANSTO
- MBA, BEc, CA, FAICD
- Over 20 years' experience in commercialising early stage research and technology and venture capital investment
- Director of six start-up companies

Dr Anthony Taylor - Research Scientist
- PhD in Microbiology
- Principal inventor of the NMB Technology
- 20 years experience in microbiology engineering and biotechnology

Intellectual Property

The technology is proprietary – ANSTO has two patents in this technology area, one is a provisional and the other is at PCT stage.

Investment Opportunity

ANSTO is seeking early stage investment up to $500k to demonstrate the use of a pilot plant water treatment system using the proprietary NMB technology.

For Further Information

Warren Bradey
General Manager, Access ANSTO
E warren.bradey@ansto.gov.au
T +61 2 9717 9565

Dr Anthony Taylor
Research Scientist
E anthony.taylor@ansto.gov.au
T +61 2 9717 3058

Technology

ANSTO
Nuclear-based science benefiting all Australians

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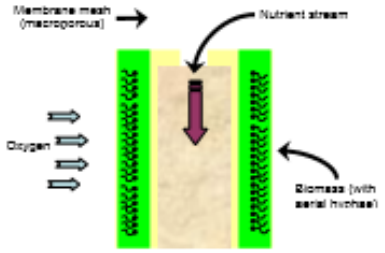

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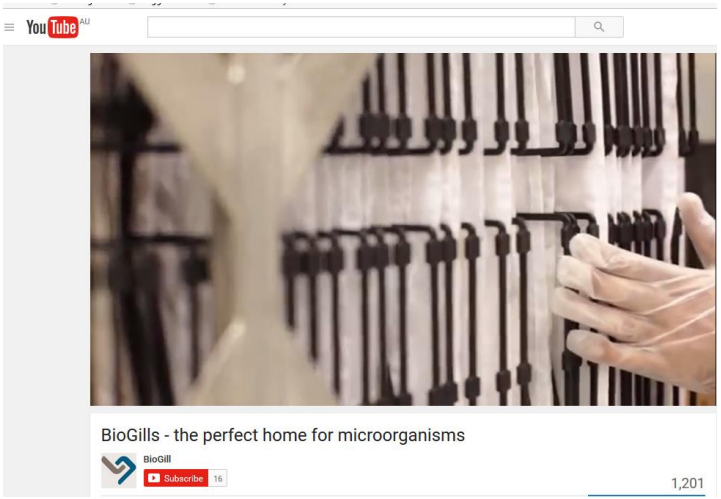
Previously printed fact sheets

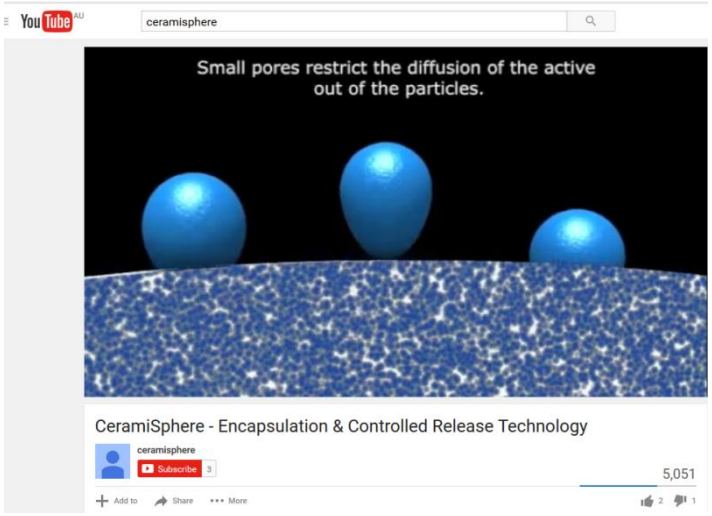
- Go to conference hand them out, post on the website or email them

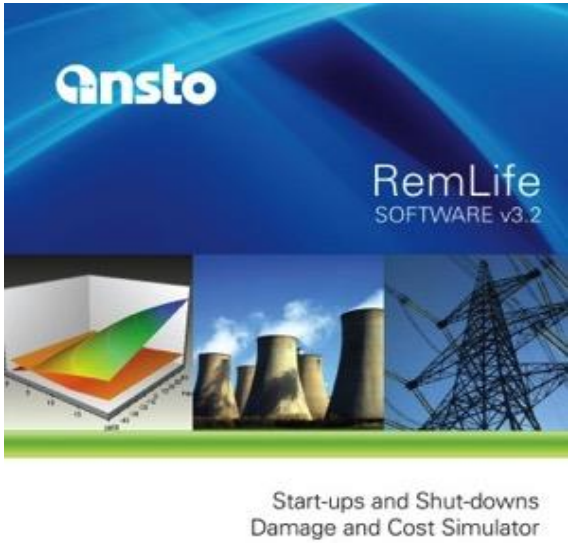
Now

- Using short YouTube video's/simple ppt animations to visually show.
- Use linkedin and twitter to access global audiences and target people in company's better
- Younger team members can be providing senior staff with newer ways to interact on social media

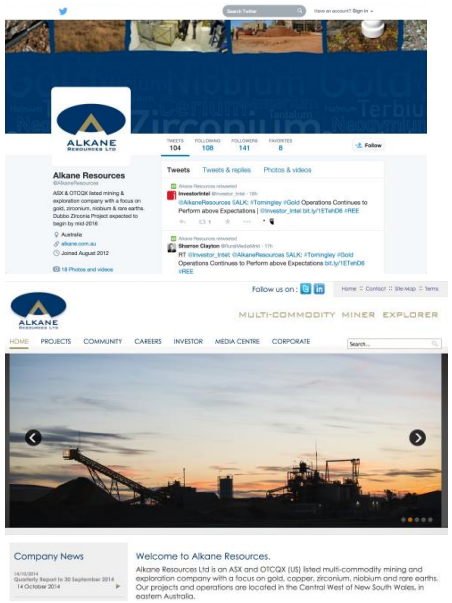
Video, animations, infographics

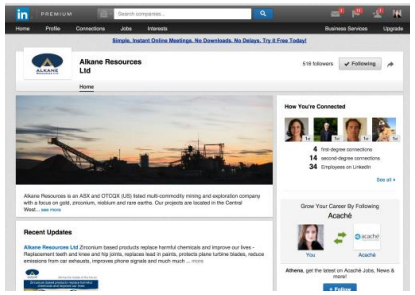






Start-ups and Shut-downs
Damage and Cost Simulator





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Crowdfunding could make research Pozible

Geoff Maslen 08 May 2013 Issue No:271

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DEAKIN UNIVERSITY AUSTRALIA Worldly

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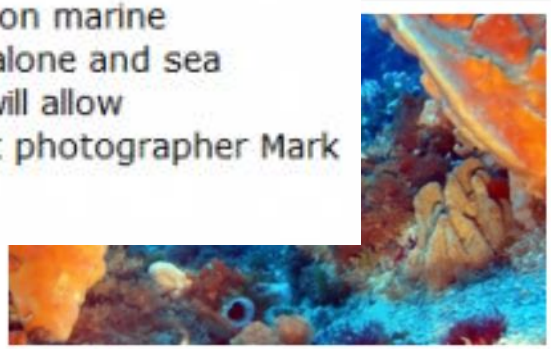
For the first time an Australian university is using the 'crowdfunding' system to attract money from the public to cover all or some of the costs of research.

Eight academics at Deakin University in Melbourne have turned to a crowdfunding site called http://Pozible.com in an attempt to raise funds for their research projects.

These include a study of the impact of salinity on marine invertebrate species such as rock lobsters, abalone and sea urchins, and the development of an app that will allow Melbournians to walk in the steps of immigrant photographer Mark Strizic and reshoot his images of their city.

Mighty Maggots v Flesh Nom Bugs

Would you like seaweed with that?



Voyages of discovery

LA TROBE UNIVERSITY

Free the Frog (... of Pesticides)

By Bert De Groef, Freda Nicholson, Yugo Watanabe, Sylvia Grommen, Diana Rayment and Almas Ramadhani Juma

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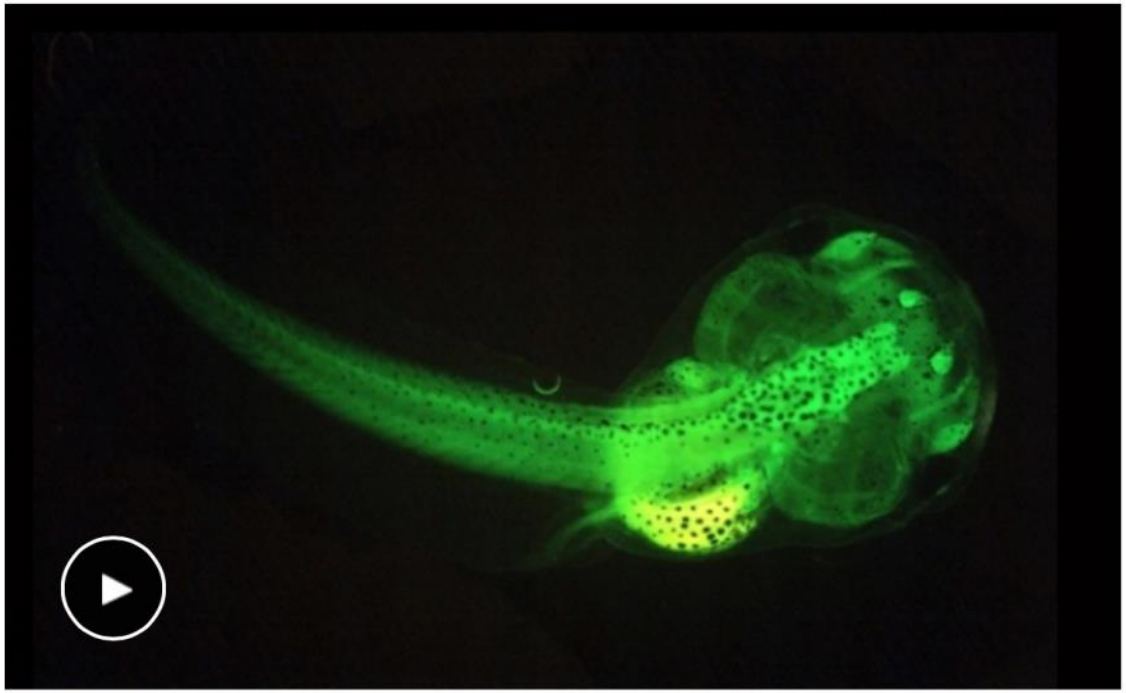


A$ 10,520 Pledged of A$10,000

0 Mins to go

Deadline 06 Oct 2014 at 13:59 pm KST

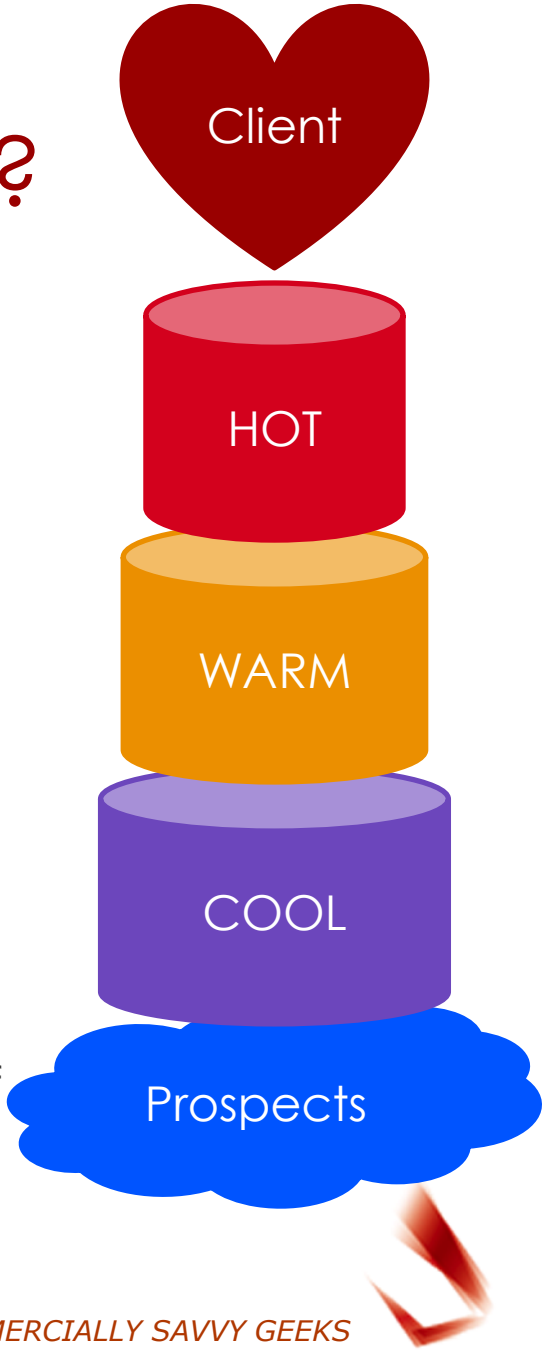
127 Supporters

Melbourne http://pozi.be/freethefrog Research Embed Watch Report

Making an opportunity pipeline – New customers?

"Who you know. Not what you know."

- Start looking – easy steps…
  - Networks
    - Researchers
    - Business / Industry groups
    - Alumni
  - Web
  - Social Media: Linkedin, facebook, twitter
- Get them to find you – harder steps
  - Form network groups
  - An offer they can't refuse
  - Stand out from the crowd : What's your point of difference?



Natalie Chapman
Managing Director

P: +61 418 642 556
natalie@gemaker.com.au
www.gemaker.com.au

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