Partnering For Success: Ventures That Work For Both Academia and Industry

“Finding Partners For Collaboration”

Dave Lovetro, Business Development Manager
AkzoNobel Pulp and Performance Chemicals
Presented at the Fourth Academia Industry Forum
Kennesaw State University Center
November 05, 2014
Today’s Presentation Agenda …

- The Open Innovation Concept … “Where” and “How” To Look
- Open Innovation Facilitators … Global Network Outreach
  - Three Examples … Capabilities & Approaches
- Additional OI Resources & Tools … Team / Organization Level
- AkzoNobel’s Approach to Open Innovation … The ANNI Process
- Some Q & A
An Introduction … Dave Lovetro

Business Development Manager; AkzoNobel Pulp and Performance
- Over 29 years within the AkzoNobel Organization
- New Product Development
- New Market Introductions
- Disruptive Technology that Adds Value to the Core Products …
  ✓ World’s Leading Supplier of Sodium Chlorate and Chlorine Dioxide Generation Technology
  ✓ Regional Supplier of Hydrogen Peroxide

Innovation Coordination Within North America (since 2005)
- Idea Collection and Management Global Decision Team
- Technology Scouting for Licensing Opportunities
- Open Innovation Initiatives Within AkzoNobel
Finding Partners For Collaboration
The Open Innovation Concept

“There Are a Lot of Smart People in the World And Not All of Them Are Working Within Your Specific Organization!

The Challenge Is … How Can You Connect With Some of These Smart Individuals and Gain Their Assistance in Helping You Find a Useful Solution to Your Problem?
Finding Partners For Collaboration
“ The Dilemma ????”

How can you find them?

What questions would you ask of them?

How will you be able to work together?

Where should you look?

What resources can you use that might improve your chances of success?
A combination of need and solution, with a route to practically making money

- A ‘good’ opportunity needs to combine all 3 components
- Initially these must be credible, but may not be proven
- Validation is a later step in the process
- In addition, the market should be attractive.

- An opportunity is NOT
  - A product concept or specification
  - A technology or ‘good idea’
A combination of need and solution, with a route to practically making money

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Finding Partners For Collaboration
“Where Should You Look?”

“Scout Your World” … Hmmm? Easier Said Than Done!

“It’s a small world … But I wouldn’t want to have to paint it …

Comedian, Steven Wright
The Global Innovation Community
“To Scout Your World” ... Think Globally!

This is the role for the Open Innovation Facilitators ... Bring “Seekers” and “Solvers” together to deliver solutions for Seekers’ Unmet Needs!
Let’s Take A Look At Three Of The Open Innovation (OI) Facilitators With Some Of The Largest, Most Diverse Expert Networks Across the Globe …
NineSigma

- Perhaps No 1 Worldwide Facilitator for OI
- Over 2 million solution providers
- 8000 solution providers handpicked for each project
- Active in 135 countries
- Some of the many global clients:
NineSigma Weekly Update for November 11, 2009

For up-to-the-minute notification when new Requests are posted, please join our RSS feed. Click Here to see the feed. (What is a RSS Feed?)

A continuously updated, filterable list of all current Requests can be found online on our website at http://www.ninesigma.com/viewallprojects.aspx

New Requests:

**Efficient Vehicular Climate Control** - A Fortune 50 automotive company invites proposals for novel climate control technologies that reduce power consumption from a car's heating and cooling systems. More...

**Methodology for Structuring Technology Information** - Siemens AG invites proposals for information structuring methodologies. More...

**Ozone Detector** - A Fortune 100 Company invites proposals to develop an ozone sensor or sensor-system that will monitor the effectiveness of catalytic ozone reduction across an automotive finned heat exchanger. More...

**Recovering Platinum Group Metals from Hydrochloric Acid Solutions** - A multi-billion dollar materials manufacturer invites proposals for effectively separating and recovering platinum group elements from hydrochloric acid from ores. More...
NineSigma and Grand Challenge Events

$12 Million Awarded to 24 Winners in Round One of CCEMC Grand Challenge: Run by NineSigma

- The best of 344 submissions from 37 countries on 6 continents offer innovations to reduce greenhouse gases by 1 megatonne per year through novel approaches in converting carbon from a liability to an asset in Alberta, Canada

- First Round Winners Included …
  - The University of Maryland (USA)
  - McGill University (CA)
  - University of British Columbia (CA)
  - University of California Riverside (USA)
  - Robert Gordon University (UK)
  - University of Alberta (CA)
Yet2.com

- Founded in 1999 to help technology clients realize value from their IP through Licensing / Technology Transfer
  - Advisory Board: AGFA, Air Products, Bayer, DSM, DuPont, Philips, P&G

- Privately-held, World-Wide Organization
  - Offices in USA, Europe, and Asia

- Yet2.com® Internet Presence: 130,000+ Registered Users
  - Yet2.com Marketplace: Browse Technologies / Technology Needs
  - Yet2Ventures: Provide Liquidity for Venture Investors
  - Government Collaborations: NASA & CoECI
  - Patent & Technology Brokerage
yet2.com Links 6062 Holdings LLC and DuPont Central Research & Development in Artificial Soil Licensing Agreement

23 August 2005  6062 Holdings LLC, of Beachwood, Ohio, has licensed patents for an artificial biodegradable soil technology from DuPont Central Research & Development (CR&D). The agreement grants an exclusive global license to further develop and commercialize this DuPont technology.

yet2.com Inc. brought the two parties together five months ago when DuPont CR&D posted information about this available technology on the yet2.com website. 6062 Holdings LLC noticed and responded with interest.

The technology provides the optimum balance of water and gases necessary to sustain higher rates of plant growth through the use of in-ground bio-degradable polymer fiber balls. The fiber balls also reduce shipping and handling costs because they are lighter than the soil plants that are currently shipped. The fiber balls can also be watered from below, as opposed to being sprayed from above as traditional soils require. The fiber balls retain 30 to 50 times their weight in water, and need less than half the amount of water required in soils.
InnoCentive

- Since 2001, using “Challenge Driven Innovation”, leveraging open innovation and crowd-sourcing to implement actionable solutions to clients problems, opportunities, and challenges
  - Advisory Board: Academia-based Innovation & Management, and Healthcare Non-Profits

- World-Wide Headquarters, Waltham, MA USA; EMEA Headquarters, London, UK

- Internet Presence: 300,000+ Registered Solvers from nearly 200 countries
  - Access to 13+ million creative minds through Partnerships (e.g.; Nature Publishing Group, Scientific American)
  - Premium Challenges … Success rate of 85%
  - Various Challenge Types … Simple Ideation to RTP
  - InnoCentive@Work … Private Crowdsourced Idea Management
Fundamental Research & Mechanisms

INNOCENTIVE 4470259  
ALS Biomarker  
$1,000,000 USD

INNOCENTIVE 4654000  
Test Method to Determine the Mechanism of “Pop” Failure of a Coating System  
$20,000 USD

INNOCENTIVE 297790  
Low Surface Energy Particles for Reduction of Friction

INNOCENTIVE 5050499  
RT Oxidation Catalyst  
Identify a catalyst or catalyst system which oxidizes organic compounds at room temperature  
$15,000 USD

INNOCENTIVE 4495070  
Complexity Reduction by Systems Models Based on Generic Functional Networks  
$15,000 USD

INNOCENTIVE 4700153  
New Drug Candidates for DMD
## Example Comparisons Among OI Facilitators

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Local Innovation Community Resources
UTEK® Corporation is a business development company that identifies, acquires, and finances the transfer of University technologies for its Corporate clients. On July 01, 2005, UTEK acquired the assets of Knowledge Express® Data Systems. The Knowledge Express® service is developed, and maintained in the UTEK® King of Prussia, PA office. Since 1991, Knowledge Express® has systematically created a unique information tool, combining premier business development resources with expert search, and report generation functionality. As a result, UTEK® provides the ability to efficiently deliver a reliable, powerful, and comprehensive information service to individuals, departments, and even global organizations.
Local Innovation Community Resources

- A near 20 Year Old Innovation Company of 650,000+ Users
- Pfizer, Dow, HP, Whirlpool, Coca Cola, Nokia, Cargill, McDonalds
- Target ROI From Imaginatik Use … 10 X Return!
- Idea Management Tool “Idea Central” Features:
  - Opportunity Management - Early Sponsorship Establishes “User Pull”!
  - Open Innovation … The Basis of Idea Central’s Portal Page!
  - Idea Build Feature … Built In!
  - Benefit Analysis for Estimated Value … Reporting for Incremental Revenue!
Local Innovation Community Resources
HYPE Softwaretechnik GmbH

- THE COMPANY: Hype Softwaretechnik GmbH / Hype Software LLC
  - Founded 2001 as a spin-off from DaimlerChrysler
    - 50 employees in Bonn, Germany and Denver, Colorado
  - Specialized in idea management
    - #1 world wide in terms of corporate installations (110+)
    - #2 world wide in terms of revenue ($4,500,000)

- THE PRODUCT: HypeIMT 7.4
  - Supports and integrates all flavors of idea management
  - Contains best practices from more than 130 projects
  - Standard software, configured by clicking and typing …No Programming Required
  - Extremely flexible
Introduction

Sagentia ... Where we are

Cambridge UK  Washington USA  Fotan Hong Kong  Frankfurt Germany  Stockholm Sweden
### Introduction

**Which sectors**

We work with our clients across five global sectors:

- **Medical**
  - AstraZeneca
  - Convatec
  - Johnson & Johnson
  - GlaxoSmithKline

- **Industrial**
  - FRANCO CITY POSTAL
  - BAE SYSTEMS
  - DaimlerChrysler
  - Invensys

- **Telecoms & Media**
  - BT
  - Deutsche Telekom
  - Vodafone
  - Reuters

- **Chemicals, Materials, Energy**
  - BASF
  - RWE
  - SGL Carbon Group
  - Duracell
  - Tetley

- **Consumer**
  - KENWOOD
  - Hornby
  - Four Square
What do we do

We add value along the entire product/service development process

- Markets
- (Unmet) Needs
- Opportunities
- Ideas & Concepts
- Value Propositions
- Technologies
- Prototypes
- Demonstrators
- Business Plans
- Products
- Services
- Capabilities

What have we done for the chemical industry?
1. Identification of new product opportunities based on technology capabilities
2. Analysis of (emerging) markets and validation of unmet needs
3. Analysis and evaluation of technology solutions
Unmet needs driven innovation programme to identify new opportunities in the surging Concentrating Solar Thermal market

Challenge
After being dormant for more than a decade, Concentrating Solar Power is en vogue again with growing project pipelines in the US and Spain. Our client wanted to identify business opportunities based on insights of unmet material needs in the industry.

Approach
We led a three month Unmet Needs Driven Innovation program built around the tools:
- Opinion Leader Interviews
- Expert Workshop
- Lead User Workshop
- Ideation Workshop

Benefit
Together with the client team we developed three concrete business propositions with action plans on how to take advantage of unmet needs. In addition the client team is now trained in the methodology, enabling them to further develop their capability themselves.
VMI NETWORK

Venture Forums

R & D Institutes

University

Incubator

Industry

Fed Labs

Social Entrepreneurs

VMI

Vencon Management, Inc.
The AkzoNobel Innovation Networks:

Internally ... AkzoNobel “Network Innovation Champions” (NICs)
... AkzoNobel Communities of Practice (CoPs) Within RD&I Globally
Externally ... The NineSigma Expert Network
Innovation Website References

- NineSigma: [www.ninesigma.com](http://www.ninesigma.com)
- Yet2.com: [www.yet2.com](http://www.yet2.com)
- InnoCentive: [www.innocentive.com](http://www.innocentive.com)
- UTEK knowledge express: [www.knowledgeexpress.com](http://www.knowledgeexpress.com)
- Imaginatik: [www.imaginatik.com](http://www.imaginatik.com)
- HYPE Software: [www.hypeinnovation.com](http://www.hypeinnovation.com)
- Sagentia: [www.sagentia.com](http://www.sagentia.com)
Thank You For Your Attention!

If You Had Access to the Brightest Minds on the Planet, What Problem Would You Ask Them to Solve?

What Questions Might You Ask of Them?