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# *Innovation that Works*

Turning Ideas Into  
Opportunities – The Movement  
To Open Innovation

F.I.R.S.T (Forum for Innovation  
Research & Teaching) -- GSBPP at NPS

Monterey, California

[WWW.NPS.EDU](http://WWW.NPS.EDU)



# Objectives

- **Focus on organizational side of innovation**
- **Stimulate a deeper understanding of a still emerging field**
- **Share ideas, insights, knowledge with each other and the audience**
- **Connect & network with other interested parties**
- **Compare/contrast innovation initiatives within and outside the military**



# Sponsorship

- **USCG**
- **GSBPP at the Naval Postgraduate School**
- **FIRST (Forum for Innovation Research, Service and Teaching)**



# Forum for Innovation Research, Strategy, & Teaching



FIRST: *outwitting, outmaneuvering  
and outperforming our  
enemies*

FIRST: *responding to global  
disasters*

FIRST: *leading innovation within  
the military*

Sponsored by the:  
Graduate School of Business &  
Public Policy (GSBPP)  
Office of Naval Research (ONR)  
Executive Learning Officer (ELO)



# Panel Members

- **Marc Ventresca - Professor, NPS**
- **Roxanne Zolin - Professor, NPS**
- **Paul Reed – IBM**
- **LCDR Gary. M. Thomas – USCG**
- **Neal Thornberry – Innovation Chair,  
GSBPP/CEE and Professor, Babson College**



# Format

- Session 1 – Brief introductions followed by a moderated panel format
- Session 2 – Breakout tracks by area for a deeper dive





- **Greg Kelleher (IBM) Differentiating Ideas from Opportunities – *Track-1, Rm. 238***
- **Marc Ventresca and Roxanne Zolin (NPS) Creating a Culture of Innovation – *Track-2, Rm. 239***
- **Gary Thomas (USCG) The Innovators Within – *Track-3, Rm. 344***
- **Neal Thornberry (NPS/Babson) Sustaining Innovation – Building Opportunity Engines – *Track-4 Rm. 346/347***



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# Introductory Remarks





# Creating a culture of innovation

- **Marc Ventresca**

- **Strategy and innovation; services and knowledge-intensive industries; market creation and organizational innovation; (Ph.D. Stanford; faculty at Kellogg/ Northwestern, Oxford, now at NPS)**



- **Roxanne Zolin**

- **Entrepreneurship and innovation; ‘swift’ trust in hastily-formed networks, 15 years experience as entrepreneur; (Ph.D., Stanford School of Engineering; faculty at NPS and Queensland Technology University)**

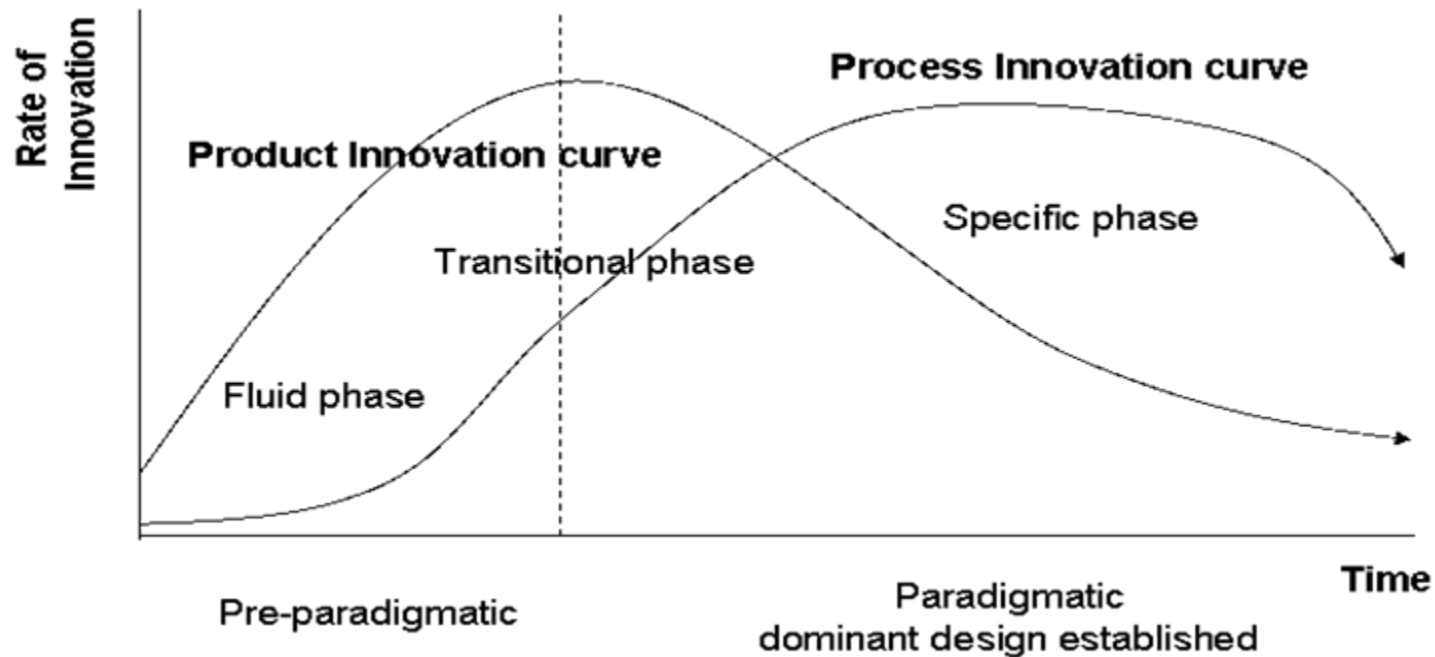


# Creating a culture of innovation

- **What is the organizational basis for innovation strategies in Google, Eli Lilly, and other firms and agencies?**

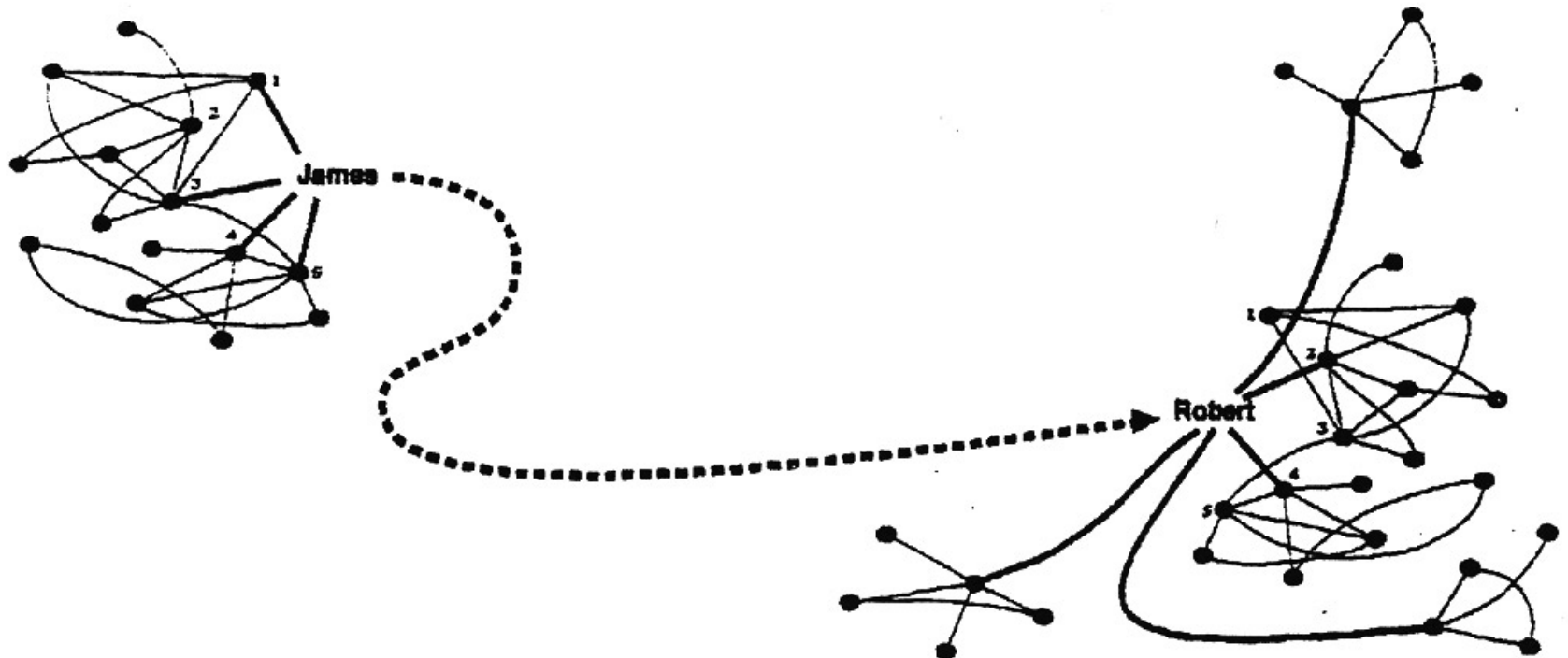


## What cultural and institutional factors drive innovation over time?



# Creating a culture of innovation

- How to develop an innovation network?
- How to support innovation across the firm or agency?







# Lead Like an Entrepreneur

*Tactics to expand your leadership capabilities by applying entrepreneurial skills in your organization*



*"Thornberry has cracked the code ..."*

— John Kilcullen  
Former Chair/CEO, IDG Books



# Entrepreneurship: The Other Side of Innovation

- “Entrepreneurship always involves innovation, but innovation does not always involve entrepreneurship”
- 15 years working with large organizations trying to rekindle/sustain both
- Identification & articulation of underlying principals
- The creation of Value



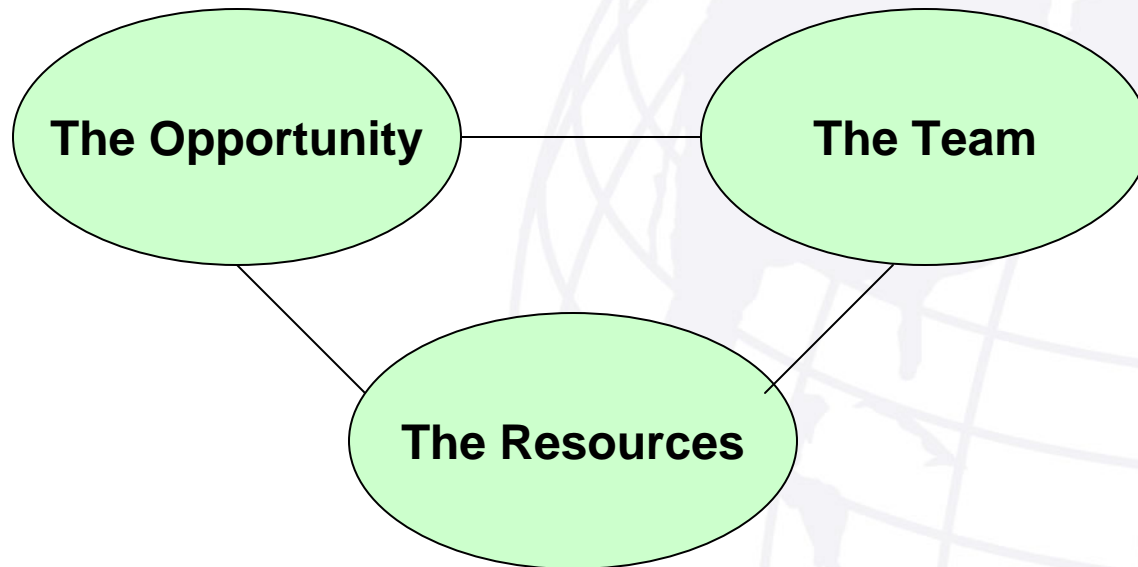


# The Entrepreneurial Process

Ideas



## The Balancing Act



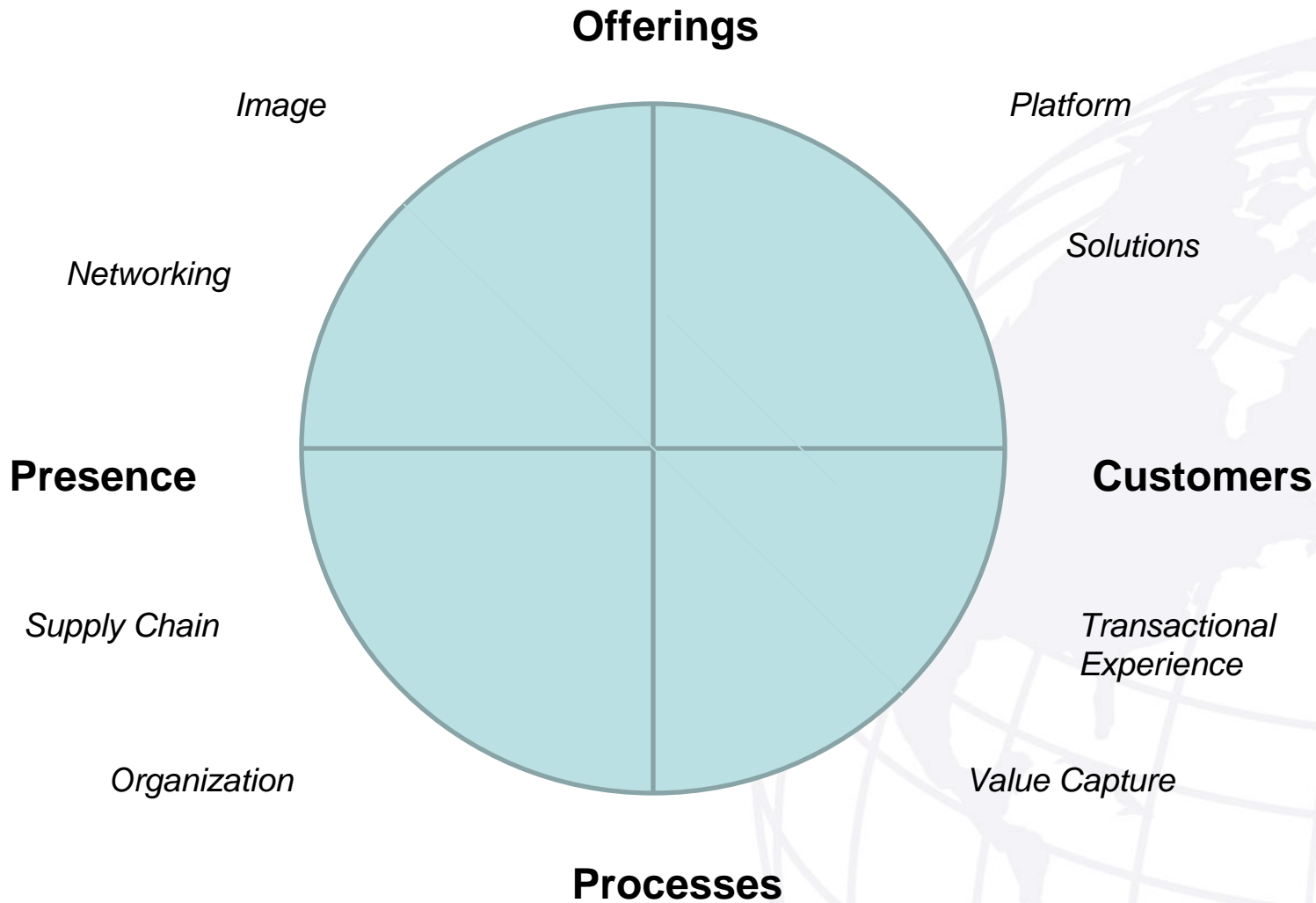


# Focusing Entrepreneurial Energy

	Internal	External
Activist	<b><i>“Miners”</i></b> (Value Chain)	<b><i>“Explorers”</i></b> (Market)
Catalyst	<b><i>“Accelerators”</i></b> (Unit)	<b><i>“Integrators”</i></b> (Enterprise)



# What kind of Innovation?

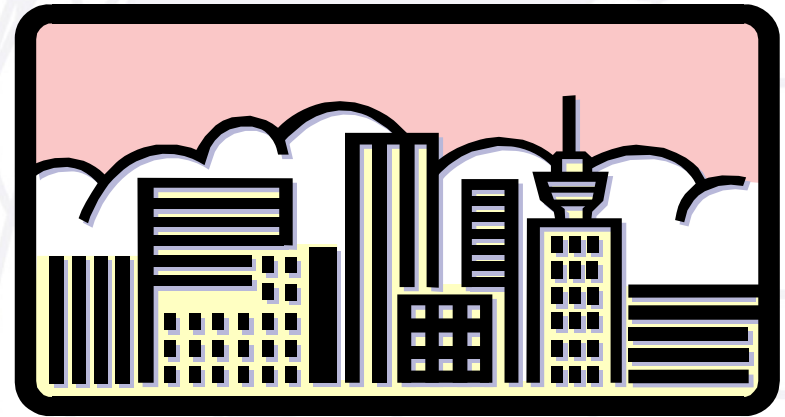
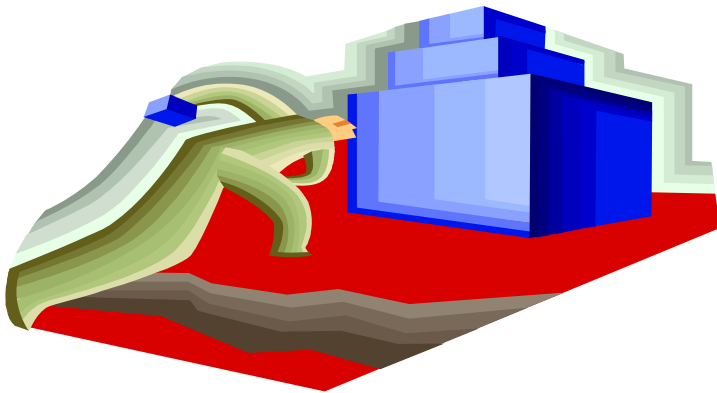


# Place your Bets!

Entrepreneurial Leaders?

Entrepreneurial Engines (structures/processes)?

A combination?





- IDG
- Siemens
- P&G
- Intel
- IBM



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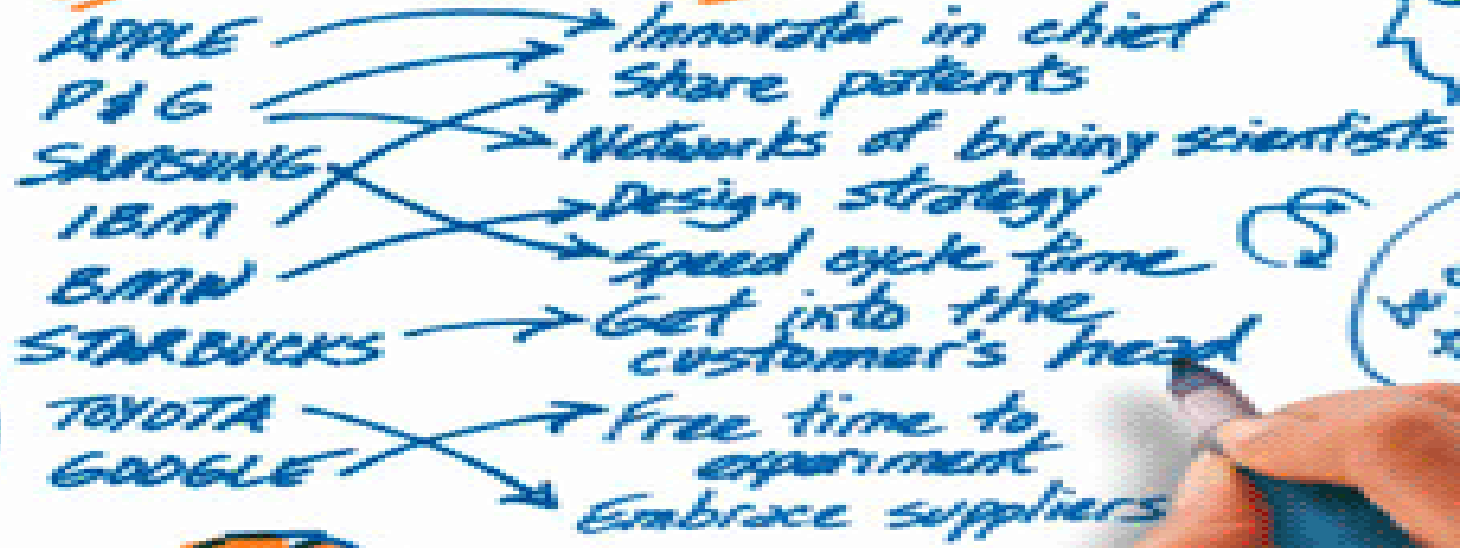
# BusinessWeek

## THE WORLD'S MOST INNOVATIVE COMPANIES



WHO

HOW



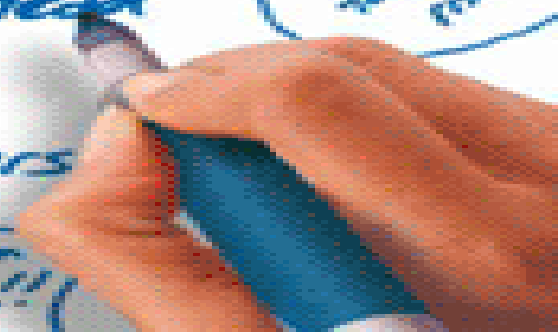
be courageous  
take big risks!



what's with Sony?



is there an innovation premium in stock price? at year!!





- Average life expectancy of all firms, regardless of size, measured in Japan and much of Europe, is only 12.5 years.
- The average life span of a multinational organization - Fortune 500 or equivalent - is around 45 years.
- One third of the companies listed in the Fortune 500 in 1970 for example, had disappeared by 1983 - acquired, merged or broken to pieces.
- The first S&P index of 90 major US firms was created in the 1920s. The firms on that original list stayed there for an average of 65 years. By 1998, the average tenure of a firm on the expanded S&P 500 was 10 years.

Source: The Living Company, Arie de Geus



- 80% of venture capital funded start-ups fail within the 1<sup>st</sup> 2 years
- 90% of all firms are unable to sustain an above-average growth rate for more than a few years
- 75% of new products launched by established firms fail
- In 2006 Hyundai beat Toyota in JD Power's Quality Survey
- 2007 Forrester Report questions ROI of government sponsored innovation research as creating no sustainable value

Source: Christensen, 2004



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# In Search of the Dragon





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## *Dragon Building*

Innovation & Corporate Entrepreneurship  
in Large Companies

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# The Best of Both Worlds

- Strategic planning
- Organizational structure
- Control of employee behaviors
- Strong/Powerful
- Opportunity focus
- Opportunity structure
- Release of employee creativity
- Agile

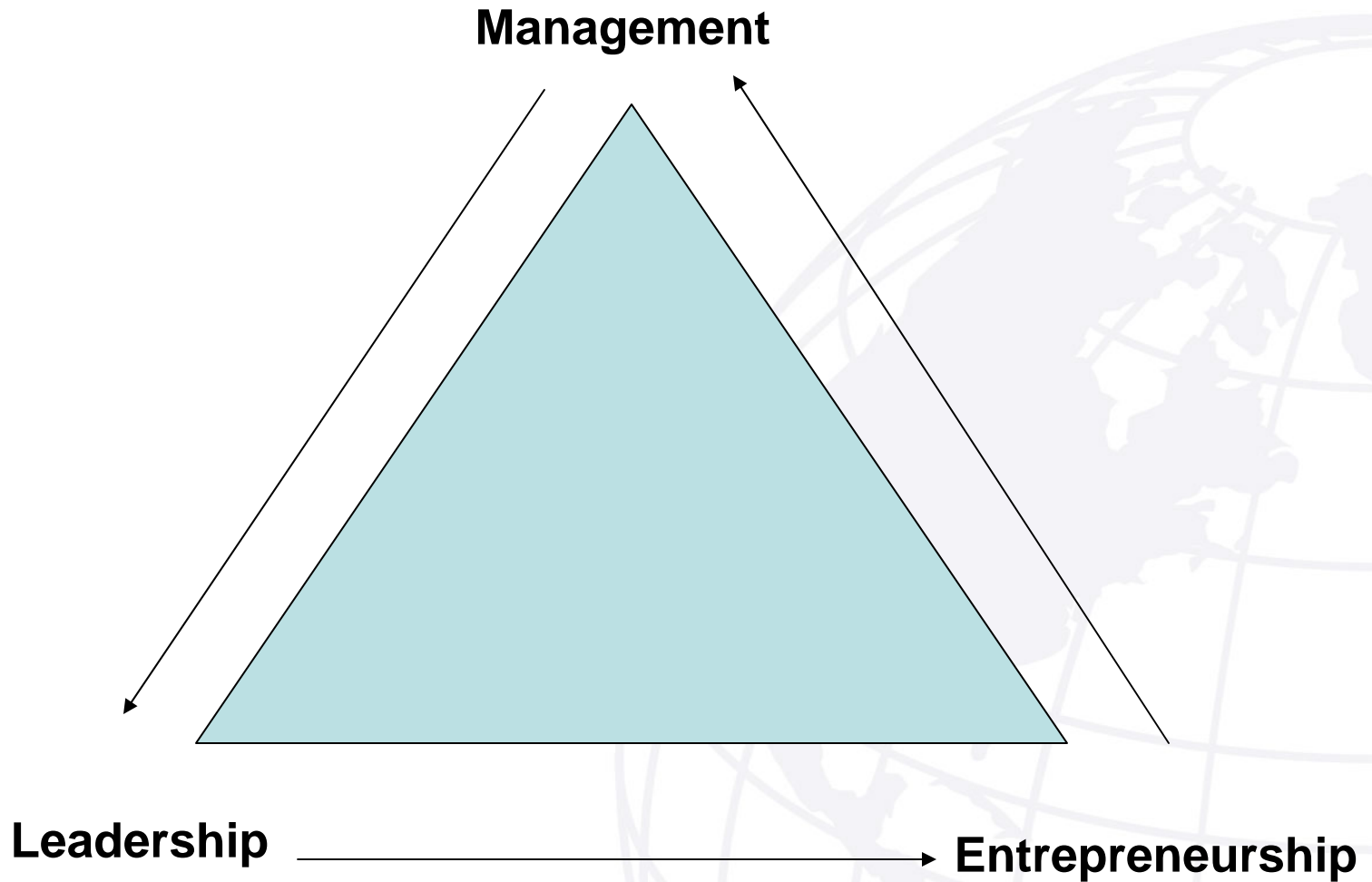


# Dragon Serum

- Siemens
- Mott's (Cadbury Schweppes)
- France Telecom
- Sodexo
- DaimlerChrysler



# A New View





# Focusing Entrepreneurial Energy

	Internal	External
Activist	<b><i>“Miners”</i></b> (Value Chain)	<b><i>“Explorers”</i></b> (Market)
Catalyst	<b><i>“Accelerators”</i></b> (Unit)	<b><i>“Integrators”</i></b> (Enterprise)



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# Dragon Dens

Structuring Innovation & Entrepreneurship  
In Large Companies

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- Systematize Innovation and entrepreneurial action
- Bolt on/Integrated
- Counterbalance current organization & culture
- Corporate Venturing Arms
- Innovation centers
- “VP of Strategy & Innovation”
- Open Sourcing





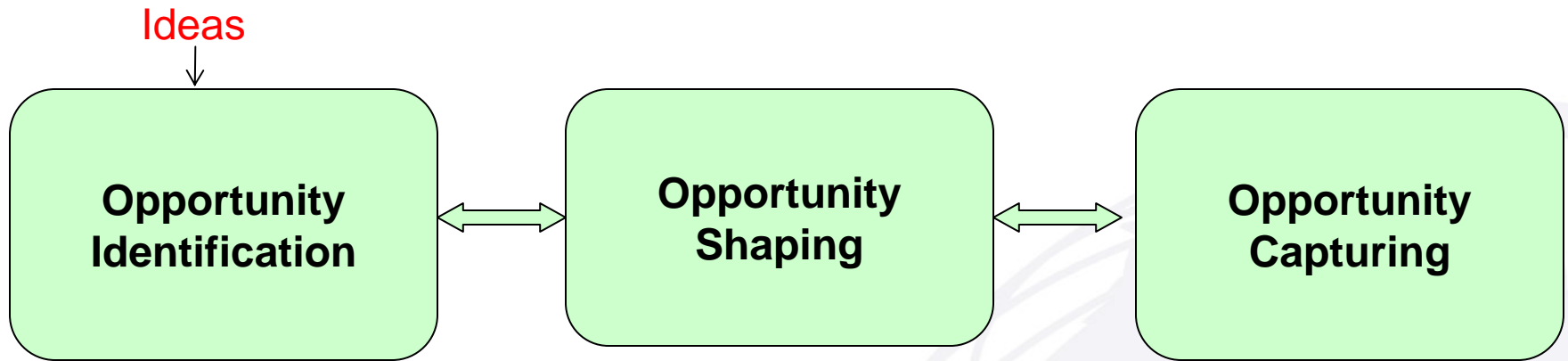
## The Identification, Development & Capturing of *Opportunities* within an existing organization requires:

Innovative changes in the pattern of resource deployment for the:

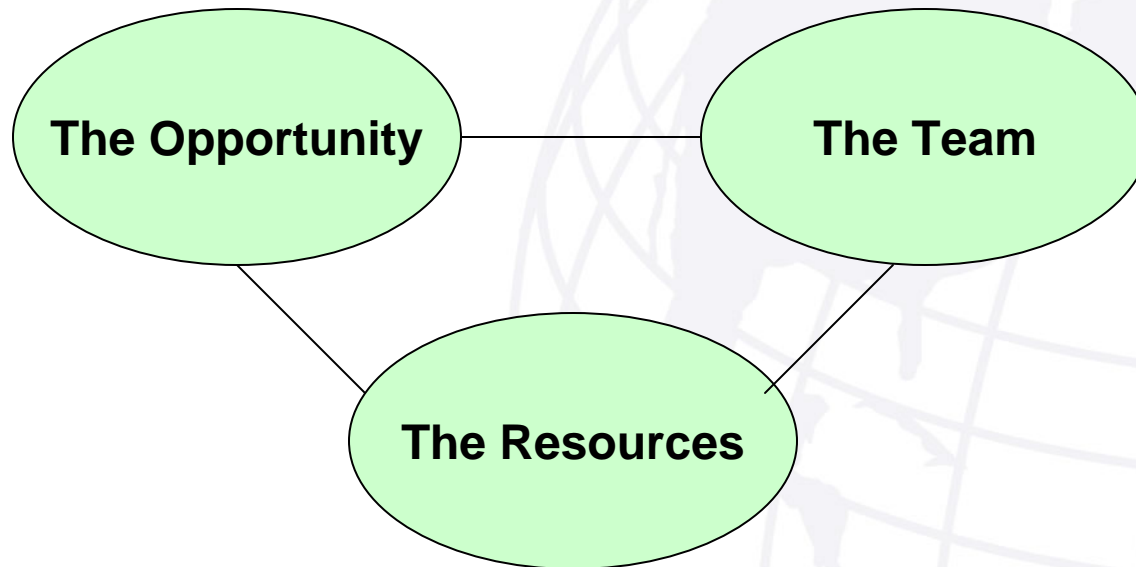
- Creation of new capabilities
- Resulting in new possibilities for significantly better performance and
- Enhanced long term value of the firm to its owners and employees



# The Entrepreneurial Process



## The Balancing Act





- Intel
- Fortis
- Siemens
- IBM
- P&G



- Stealth Entrepreneur
- Hidden Innovation fund
- Discovery
- Seed Capital
- Incubator Model



- S3 General Managers Program
- Inject Entrepreneurial Serum
- 8 Months Entrepreneurship/Marketing/Finance
- BIPS (Business Improvement Projects)
- Measurable Results



- Enough Cost Cutting
- Focus on Innovation
- Analysis of Failures
- Development of Horizons Models
- Different Financial Requirements
- Different People
- Different Stages of Growth





# EBO Failure Analysis

1. IBM management systems focus too much on short term results, not strategic business building
2. Preoccupation with current markets & existing offerings
3. Business model focused on profits & earnings not value creation
4. Financial requirements not appropriate for embryonic markets
5. IBM lacks skills in new business development



# Horizons Model

- H 3 – Mature, well established businesses responsible for most of current profits
- H 2 - On the rise, rapid accelerating growth
- H 1 - Emerging, still developing, seeds of the companies future



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# P&G Corporation

## Corporate New Ventures



# Philosophy

- Forget the “Light bulb” phenomenon
- Best opportunities will come from leveraging our internal capabilities
- Structured approach to creativity
- Make it systematic and rigorous
- History will guide us: what worked, what didn’t & why
- Tremendous value in cross-organizational synergy



# Structure & Mission

- Report directly to senior management
- Cross-organizational membership
- Entrepreneurial track record
- Tour of duty that could result in faster promotion
- Mission: to play a direct role in the development of at least one major new business per year
- Leave a knowledge trail for further new business development



# CNV Environment

- All physically together
- Full-time job
- Open floor plan, no offices, “attic like”
- Couches, coffee machines, water coolers, trend magazines
- Away from the P&G coffee cart mentality
- Emphasis on maximizing each individual’s creativity
- Off-site laboratory, support staff, MBA interns





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# CNV Processes





# Idea Generation

Thorough understanding of P&G capabilities

- Understanding of consumer needs, especially non-articulated needs
- Analysis over brainstorming
- Vision of P&G as a gold mine
- CNV to sift through tons of information in search of a few nuggets
- Designed and enhanced internet search engine through USC supercomputer



# Idea Generation cont.

- Box lunches with external thought leaders
- Targeted convention and trade-show attendance
- Team members selected ideas for which they had some passion and personal interest
- Examined the function of technology, not its specific brand application
- Examined trends and look for intersections



# Idea Evaluation

- “The key to innovation is not picking the winners, but weeding out the losers” (Craig Wynett CNV Manager)
- 3 Basic Questions:
  1. Is there a basic consumer need?
  2. Does P&G have a technology(s) that can satisfy this need?
  3. Can we create a profitable business model than can capture this opportunity?
- Analysis of successful/failed new product development activities



# CNV Challenges

- Handed off 5 new projects the first year
- Sector responsibility for capturing opportunities which they did not create
- Conflict regarding who should lead the search for new products
- Stretched resources due to requests for help
- CNV could become the bureaucracy it hoped to outwit
- Internal enemies



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# P&G Now







- CNV to Global BD to Licensing & CNV
- P&G still invests \$2Billion per year in research but has Corporate Innovation Fund cut in half
- “Spaghetti against the Wall”
- Laffley: “More discipline”
- GBD: Swiffer, Thermacare, Olay
- Open to sell any one of its 27,000 patents
- Money given directly back to business unit who created it for future investments



# P & G: Connect & Develop

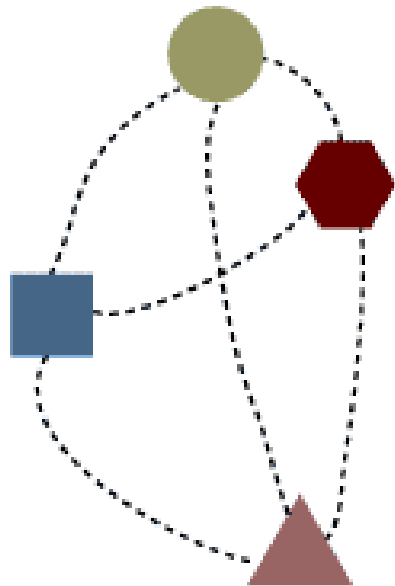
- 360 Degree Innovation - Internal
- Connect internally & externally
- Crest White Strips – R&D new film, bleach, fabric, oral care
- Olay daily facials – detergents, bounce, tissues & towels
- Intranet “Ask me”
- 21 R&D communities of practice
- Global cross business unit technology council



- 360 degree external
- 55 cross business unit “technology entrepreneurs”
- Search for ideas & solutions
- Heavy internet use
- 2002 (20%), 2005 (35%) target (50%)
- 20% decrease in internal R&D investment


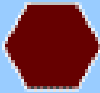
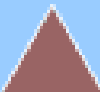

# A new model of Innovation

## Innovation Network



## Business model

## Specialization

 Inventor	Intellectual powerhouses that conduct basic science research and/or design products and services that result in patentable inventions. <b>Example:</b> MIT, IDEO, SRI, GE Global Research, KAIST, Celera, Oxford, Microsoft Research, HP Labs, CNRS, Persistent, IIT
 Transformer	Multifunction production and marketing services that convert inputs from Inventors and other Transformers into valuable business innovations for either internal or external customers. <b>Example:</b> Dell, Pfizer, BP, Merrill Lynch, SAIC, IBM, Infosys
 Financier	Funding source for Innovation Network service providers — especially Inventors and startup Transformers. Financiers will seek to own intellectual property rights for inventions. <b>Example:</b> Cargill Ventures, Silicon Valley Bank, Garnett & Helfrich Capital, InterActiveCorp, ICICI Bank, Vulcan, IP2IPO
 Broker	Market makers that find and connect Innovation Network service providers — buying and selling or enabling service delivery both within and among companies. <b>Example:</b> Knowledge Campus, yet2.com, PLX Systems, Big Idea Group, InnoCentive, Evaluateserve, ISTC, Intellectual Ventures, P&G's Technology Entrepreneurs, DCMA, METI, TIE

Source: Forrester Research, Inc.



- Grafting VC models not appropriate
- Internal stakeholders must be involved from the outset
- Ecosystem focus
- Innovation from anywhere
- Networking paradigm
- Designated structures/designated roles
- Commercialization of innovation



# The 7-S + 1 Framework

