Bridging the Transition Gap

Building a Symbiotic Relationship between SBIR Firms and Technology Seekers

Beyond SBIR Phase II
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Former VP, New Venture Development – Nortel Networks
Gap Between Research & Commercial Application

- Existing Research Resources
- Existing Commercialization Resources

“Valley of Death”
“Entrepreneurial Zone”
“Gap Funding”
“Transition Gap”

Product Development Timeline:
- Idea
- Patent
- Practice
- Product
- Commercial Business

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SBIR Business Realities

SBIR Firm Challenges
- Crossing reservoir from technology development to commercial viability without business development experience.
- Often lacking technology reliability and scalability to grow into stand-alone businesses.

Technology Seeker Challenges
- Protecting and growing existing market and customer base.
- Emerging technologies often disrupt what already exists and lack robustness.
The Generational Dilemma

- Chasm exists between entrepreneurial model for startup and efficient systems in place to support status quo in larger company.

- Adoption of an open innovation model and development of a symbiotic relationship are critical for the survival of both sides of new business development equation.

Symbiotic = “A cooperative relationship (as between two persons or groups).”
Critical Business Questions

1. How to overcome the generational dilemma?

2. SBIR Firms: How to attract the attention of a potential investor with a compelling company/technology value proposition?

3. Technology Seekers: How to embrace an open innovation model that challenges the status quo?

4. The Symbiotic Relationship: How do two dissimilar companies work effectively together?
The Generational Dilemma

What are the cultural differences that need to be understood?

What are the conflicting objectives and expectations regarding timing, risk orientation and performance?
## Technology Seekers Cultural Divide

<table>
<thead>
<tr>
<th>Operating Groups</th>
<th>New Business Development Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy and Type of Innovation</strong></td>
<td>Current Strategy; Incremental Innovation to Extend Existing Business</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>Operational Excellence, Customer Intimacy and Execution Skills</td>
</tr>
<tr>
<td><strong>Risk Profile</strong></td>
<td>Risk Averse with Focus on System Efficiency</td>
</tr>
<tr>
<td><strong>Investment Timing and Revenue Focus</strong></td>
<td>New Products in 6-18 Months; Profit and Loss Focus with In-year Revenue Streams</td>
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</table>

- **Strategic Intent and Opportunism:** Platform and Radical Innovation for Growth and Renewal
- **Cultivation:** Employee Intimacy and New Business Creation Skills
- **Risk Mitigation through Staged Learning**
- **New Businesses in 3-5+ Years:** ROI over Long Term with Portfolio Management to Hedge Bets
## Cultural Perceptions and Realities

<table>
<thead>
<tr>
<th>Technology Seeker View of SBIR Firm</th>
<th>SBIR Firm View of Technology Seeker</th>
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<tbody>
<tr>
<td>Unfocused</td>
<td>Bureaucratic</td>
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<tr>
<td>Inexperienced</td>
<td>Risk Averse</td>
</tr>
<tr>
<td>Immature Technology</td>
<td>Analysis Paralysis</td>
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<tr>
<td>Demanding</td>
<td>Resource Drain</td>
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<tr>
<td>Unrealistic Expectations</td>
<td>Opportunistic</td>
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<tr>
<td>Yet…</td>
<td>Yet…</td>
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<tr>
<td>★ Incredible Opportunity to Fill Competency Gaps and Source Emerging Technologies</td>
<td>★ Incredible Assets (Brand, Channels, People, etc.), Global Reach and Economies of Scale</td>
</tr>
</tbody>
</table>
Conflicting Objectives and Expectations

- **Timing**
  - Operating Groups: New products in 6 to 18 months.
  - NBD Groups: New businesses in 3-5+ years.
  - **Small Companies:** First customer priority (get to alpha trial fast).

- **Risk Orientation**
  - Operating Groups: Risk averse and focused on execution and operations.
  - NBD Groups: Risk mitigation through staged learning approach and strategic partnerships to share the risk.
  - **Small Companies:** It is all about risk.

- **Performance**
  - Operating Groups: Profit and Loss management and in-year revenue streams.
  - NBD Groups: Return on investment (ROI) as a long term proposition with portfolio management to hedge bets.
  - **Small Companies:** One bet that must work.
SBIR Firm: Company and Technology Value Proposition

How does a SBIR Firm:

Effectively communicate the value of its company to attract the attention of Technology Seekers?
Communicating SBIR Awardees Value

What are you doing for the Tech Seeker or Prime and what is in it for you?

Links to Technology Seekers

Radicalness of the Technology

- Technology Related Issues
- Market Related Issues
- Strategy Related Issues

Address Tech Seeker problems (how to help the war fighter, stop a terrorist, etc.)
Business Considerations

Technology:
◆ What is the value of the technology and your technical expertise for the Technology Seeker, e.g., feasibility, reliability, scalability, technical capabilities, prototype, etc.?

Market:
◆ What is the potential impact of this technology on the market, e.g., game changing, application possibilities, technology disruption, value proposition, etc.?
Business Considerations

Strategic:

- What business opportunity does your technology offer the Technology Seeker, e.g., order of magnitude potential market size, strategic alignment, cost savings, innovation potential, etc.?

- What do you need to think about for organizational positioning, e.g., technology potential to cannibalize existing business, culture conducive to partnering, champion in place, resources to negotiate and manage partnership, career risk for Tech Seeker decision maker, etc.?
Technology Seeker: Embracing an Open Innovation Model

Why do Technology Seekers need different management practices for an open innovation model?

What are the right questions Technology Seekers should be asking to determine business potential?
Open Innovation = What is Known and Unknown

- **Invention** is creation of something that was previously unknown.
- **Discovery** is becoming aware of something that may be known in other venues but was not known to the New Business Development Group or the company.
- **Open Innovation Model** = Invention activities from internally focused research + discovery activities within and outside the company.

Open Innovation shortens time to understand technology's value to the market and accelerates commercialization.
New Capabilities Required for Growth

- Traditional approaches such as internal development or acquisition of outside firm are insufficient.
- Open innovation model is emerging to fill technology and other competency gaps through partnering (Co-development vs. supplier relationships).
Relationship Complexity

Project Team

NBD Group

Early Adopter Partner

Manufacturing Partner

Funding Partner

Technology Development Partner

R&D
Exploratory Marketing
Senior Mgmt
Business Unit

Universities
Lead Customers
Government
Media
SBIR Awardees

O R T M
<table>
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<th>Different Questions Asked: Quantifiable versus Potential Value</th>
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<tbody>
<tr>
<td><strong>New Products</strong></td>
</tr>
<tr>
<td>✓ How should we position the product?</td>
</tr>
<tr>
<td>✓ How can we segment the market?</td>
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<tr>
<td>✓ How much market share can we capture?</td>
</tr>
<tr>
<td>✓ How fast will the market grow?</td>
</tr>
<tr>
<td><strong>New Businesses</strong></td>
</tr>
<tr>
<td>✓ What applications will the technology enable?</td>
</tr>
<tr>
<td>✓ What markets could the technology create or disrupt?</td>
</tr>
<tr>
<td>✓ What is the order of magnitude market potential and/or cost savings?</td>
</tr>
<tr>
<td>✓ How can we prototype or scale the technology?</td>
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Different Questions Asked:
Business Model and Market Entry Strategy

- How will the business model unfold?
  - Which is the best path to the market and what parts of the value chain will the company retain versus outsource based on profit potential and competency gaps?
  - Which partnerships are required initially and how will this change over time?
  - How should additional partners be encouraged to participate?

- What will be the market entry strategy?
  - What are the smaller applications that will lead to a killer business? (Potential for conflict with Tech Seeker “Big M” focus)
  - What are the appropriate selection criteria and interim performance metrics?

- How do we acquire the right resources to proceed?
The Symbiotic Relationship

*How do two dissimilar organizations learn to communicate and work effectively together?*
Building an Effective Partnership

Starts with…

- Understanding different worlds and the risks.
- Respecting each other and the value each brings.
- Defining mutual objectives, scope and what constitutes success.
- Identifying roles, responsibilities and expectations of each party.
- Ensuring competent people negotiate an equitable partnership and remain committed throughout.
- Accepting that partnering requirements change over time through different phases of business maturity.
- Learning to live with chaos and embrace change!
SBIR Firms: Keys to Finding a Match

1. Prepare your *value proposition* being realistic about what you can do (having a lead customer helps all!).
   a. Understand the breadth and depth of your potential market applications.
   b. Protect your core patent and most promising applications or fields of use.
   c. Develop a succinct elevator speech.

2. Learn about the *strategic drivers* of the targeted Tech Seeker to position the value of your company and technology (address the questions in your proposals).

3. Find the *right group* in the Tech Seeker, most often a New Business Development versus Operating Group!
Tech Seekers: Keys to Finding a Match

1. Focus on understanding an *inventor’s motivations* to uncover inherent value.

2. Create and facilitate an *open innovation environment* that recognizes the tension among your *internal dynamics* of entrepreneurial orientation versus operational excellence, the needs of a small business and customer requirements.

3. Identify *value chain and business model gaps* as well as your *likely market entry strategy* to be clear about technologies you are seeking to close the gaps.

4. Develop reputation for being *reasonable on IP licensing fee* given uncertainty this creates for SBIR firm!
SBIR Program Considerations

1. Introduce new business development and commercial transition management practices to address structural issues in moving from Phase II to III.
   a. Provide funding through the transition.
   b. Clarify roles and responsibilities based on governance not management model.
   c. Offer investment and partnering incentives during the transition period.

2. Encourage cross agency collaboration to obtain greater leverage in important technology, market and industry sectors beyond aerospace and defense.

3. Adopt an open innovation mindset to bring down silos in government, companies and the world!
Thank You! Questions?
Please come to our workshop from 7-9pm tonight to learn more.

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