



How to Transition to the Commercial Sector

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What is Commercialization?

“The process of developing markets and producing and delivering products or services for sale (whether by the originating party or by others)..... commercialization includes both government and non-government markets.”

– National Science Foundation SBIR Solicitation



DAWNBREAKER®

- **Professional Services firm - Rochester, NY**
- **Worked with over 3400 SBIR/STTR firms**
 - Department of Energy, EPA, Navy, NSF ,NIH, NIST
 - Phase 2 - Commercialization Assistance Program (CAP)
 - Transition Assistance Program (TAP)
 - Phase 1 - Commercialization Planning Program (CP²)
- **50% receive private sector investment**
 - 12-18 months of completing Commercialization Assistance program (CAP)

What is a commercialization strategy?

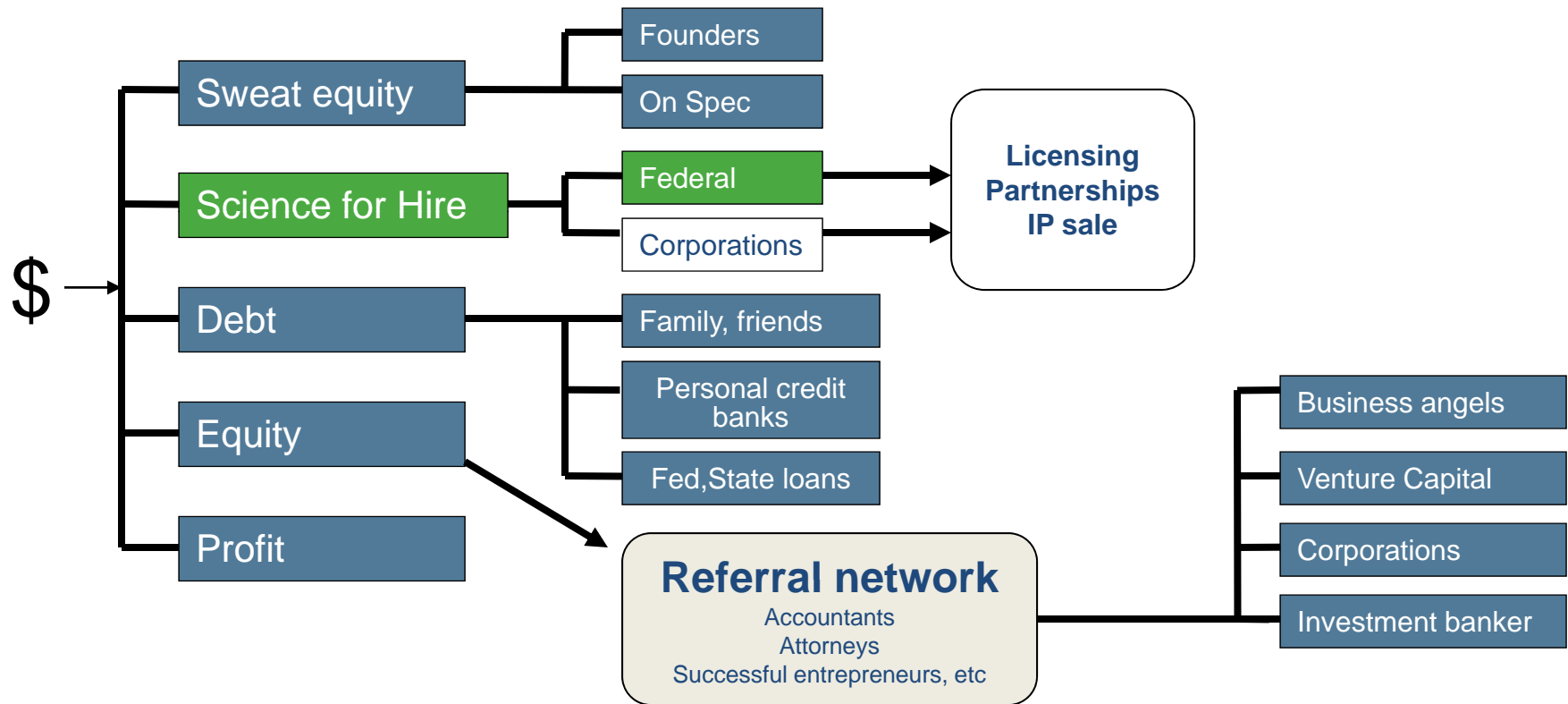
- **Not defined in solicitations.....but alluded to**
 - “....your company’s strategy for converting your proposed SBIR research into a product or non-R&D service with widespread commercial use -- including private sector and/or military markets.”
 - *DoD SBIR solicitation*

Commercialization Strategy

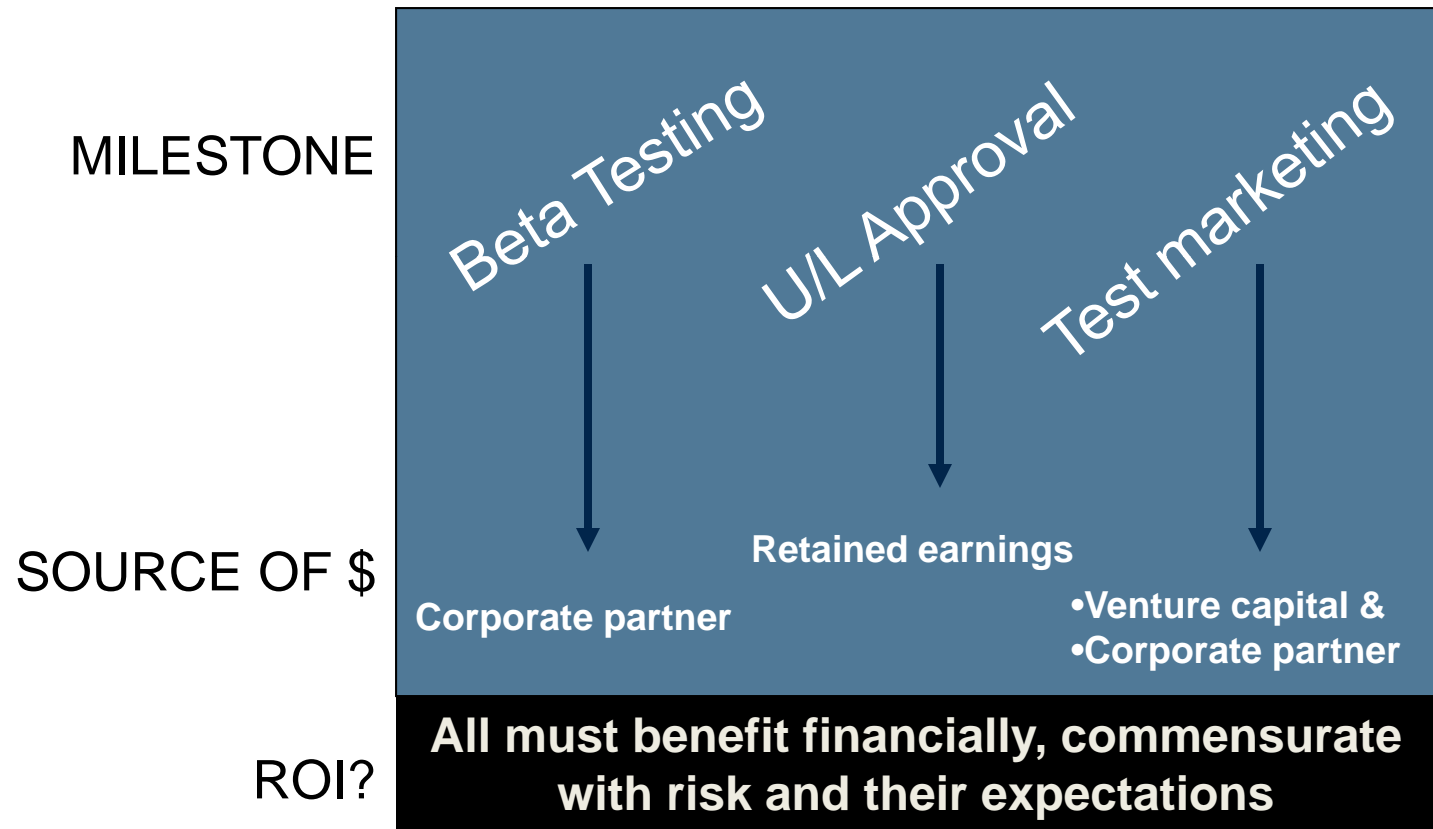
- **The series of financing options that a company entertains to move its technology from concept to the marketplace**

Milestone	How Funded?
Concept development	Phase I SBIR
Business case analysis	G&A
Prototype development	Phase II SBIR
Intellectual property protection	Retained earnings
Beta testing	Corporate partner
U/L approval	Retained earnings
Test market introduction	Equity investment
Marketing	???
Scale-up of Production	???

Roadmap to Financing Options



All require a Return on Investment!





Strategy selection process

- **Iterative build and test**
- **Articulate at the outset and**
- **Revisit**
 - as you collect additional market data
 - as you develop the business case
 - during negotiations with partner/investor

Factors effecting commercialization strategy

- **Mission**
- **Vision**
- **Business philosophy**
- **Your current situation**
- **Customer requirements of supplier**
- **Window of opportunity**
- **Competitors**



Mission

- **Business functions**
- **Products and technologies**
- **Markets served**
- **Sustainable competitive advantage**



Sample Mission Statement

“Soarrell Medical Systems develops, produces, markets, and supports proprietary, patient-oriented software, biometric smart cards and readers which interface with computerized patient record (CPR) systems. We offer outstanding customer support and share the financial risk with medical practitioners. We are dedicated to making it easier for physicians in private practice to spend more time providing quality care.”



Elements of Vision

- **5-years out**
 - Financial goals - revenue goals, profit margin goals
 - Market goals - customers served, market niche, geographic region, market share
 - Products and services
 - Image- How will you be perceived by customers, competitors, employees, community



Typology of Visions

	Revenue	Employees	Purpose	Public
Life-Style	\$2 million	30-40	Support owners	Private
Foundation	\$10 – 30 million	40-400	Start new industry	Private
High Potential	\$20 – 30 million	500+	Growth & value	Go public



Business Philosophy

- **I don't want to give to control**
- **I want to try it all**
- **I want to enjoy myself**
- **I don't care who gets rich**



Current situation

- **Financial health**
- **Sustainable competitive advantage**
- **Stage of product/technology development**
- **Management**
- **Market readiness**
- **Risk: technology, market, management**



Competitors

- **Positioning to**
 - Take advantage of a window of opportunity
 - Broaden a customer base
 - Expand services

Customer requirements of suppliers

- **Financial stability**
- **Platform interface issues**
- **Quality - ISO, CE certified**
- **Continuous improvements**
- **Quantities and delivery schedules**
- **Customer support**

Sample strategy - Licensing

- Vision: Life-style company
- Philosophy: Do what I enjoy
- Financing methods

Start-up

Sweat equity

Concept development

SBIR

Intellectual property

Retained earnings

Application development

Licensee

Production

Licensee

Strategy - Strategic alliance

- **Vision: Foundation company (R&D and manufacturing)**
- **Philosophy: Conservative**
- **Financing methods**

Start-up	Sweat equity
Concept development	SBIR
Intellectual property	Retained earnings
Prototype development	SBIR
Production scale up	Equity investor, converted to debt
Marketing/sales	Strategic alliance

Strategy - Equity Investment in Parent Company

- Vision: High potential venture

- Philosophy: Rich is good

- Financing options

Concept development

Sweat equity

Prototype development

Science for hire

Production
introduction

Private placement

Market penetration

Debt financing from equity investors

Sample Strategy - IPO

- Vision: High potential venture
- Philosophy: I want to try it all
- Financing options

Concept development

Prototype development

Market test

Market introduction

Scale-up

New facility

Expansion

Market penetration

Federal funding

Seed financing from angels

Retained earnings

Equity - Fortune 500 company

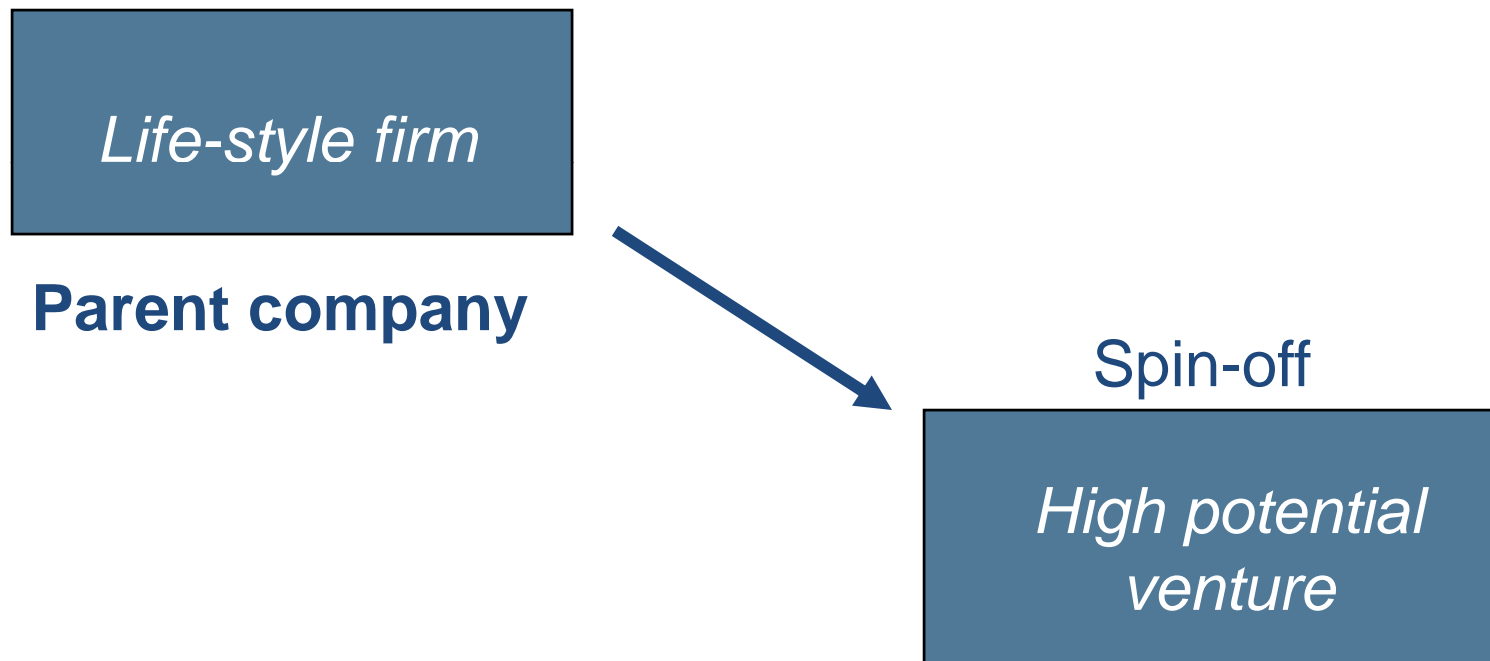
Second round financing from VC

Private placement

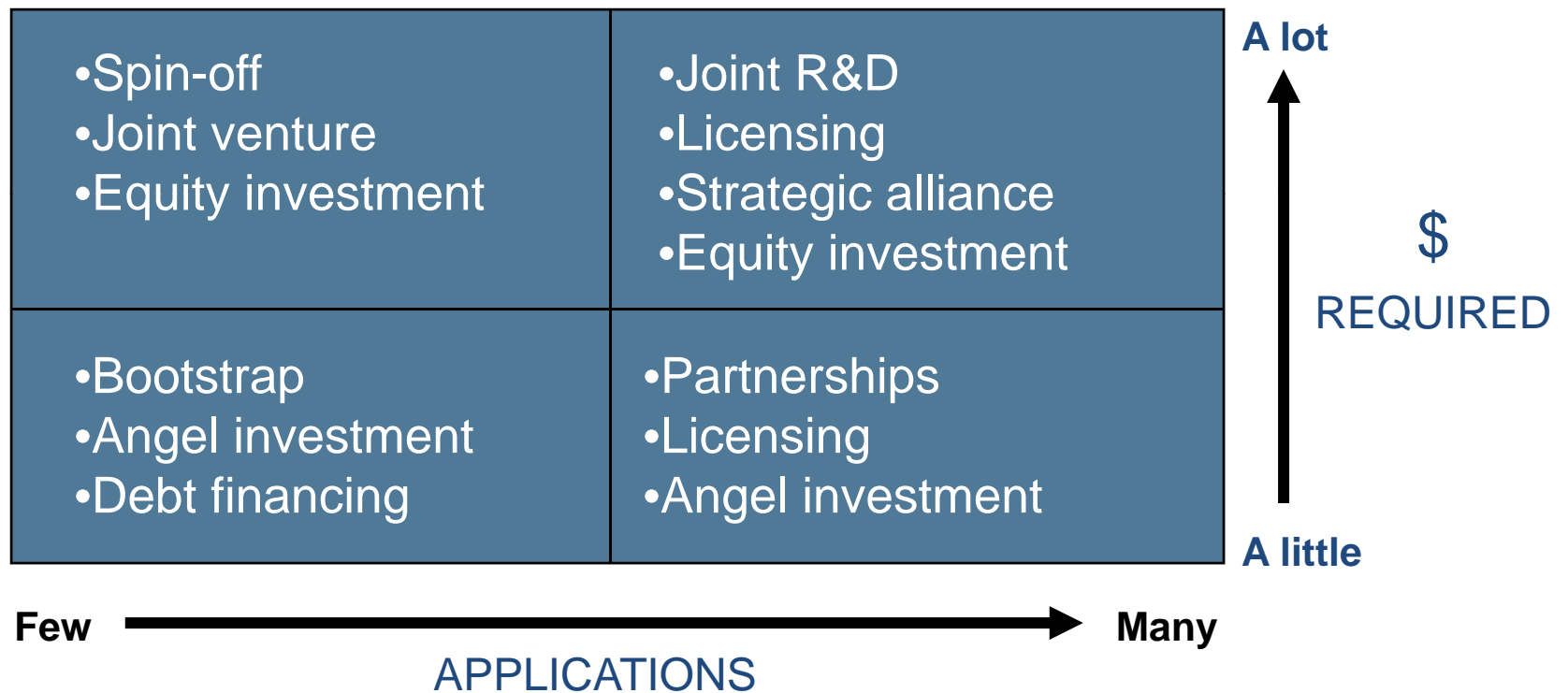
Line of credit, profits

IPO

Combination of strategies



Financing Options as a Function of Application & Resources Required





How -To

- **Management must**
 - Focus on growth of company, not just on completing the R&D
 - Understand the implications of pursuing a specific strategy
 - Licensing: attention to IP, contract law, relationships, audits
 - Angels: ROI, share control
 - Set aside time for this role, hire
 - Be measured on the extent to which