



# Business Planning and Market Research

*Jenny C. Servo, Ph.D.*

*DAWNBREAKER®*

*May 26, 2011*



# Business Planning

## ◆ A method for

- Determining if the opportunity exists
- Charts a course for realizing your objectives
- Determining the financial benefit and value-added for those involved
- Transforming management team

## ◆ The results are packaged as a business plan

- A business plan is only as good as the research that precedes it
- A business plan has internal and external value



# Before you start

- Define the intended audience
- Define your strategy (can't keep all options open)
- Understand what is important to audience
- Clearly articulate why this is good for them
- Realize you are building a case for investment/  
partnering - not just completing sections of a  
document



# Business Plan Outline

- Executive Summary
- Company & Technology
- Industry Overview
- Customers
- Market
- Competitors
- Marketing/Sales Plan
- R&D Plan
- Manufacturing/Engineering Plan
- Human Resource Plan
- Contingencies
- Financials



Mission, Vision, Commercialization Strategies

# PLANNING



# Mission

- » **Identity Statement**
  - › Business functions
  - › Products and technologies
  - › Markets served
  - › Sustainable competitive advantage
- » **For a company or a strategic business unit (SBU)**



# 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.”**



# What is Commercialization?

- » **“The process of developing a product or non-R&D service for sale (whether by the originating party or by others) in Government and/or private sector markets.”**

*-DoD SBIR Solicitation*



# 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*



# 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**

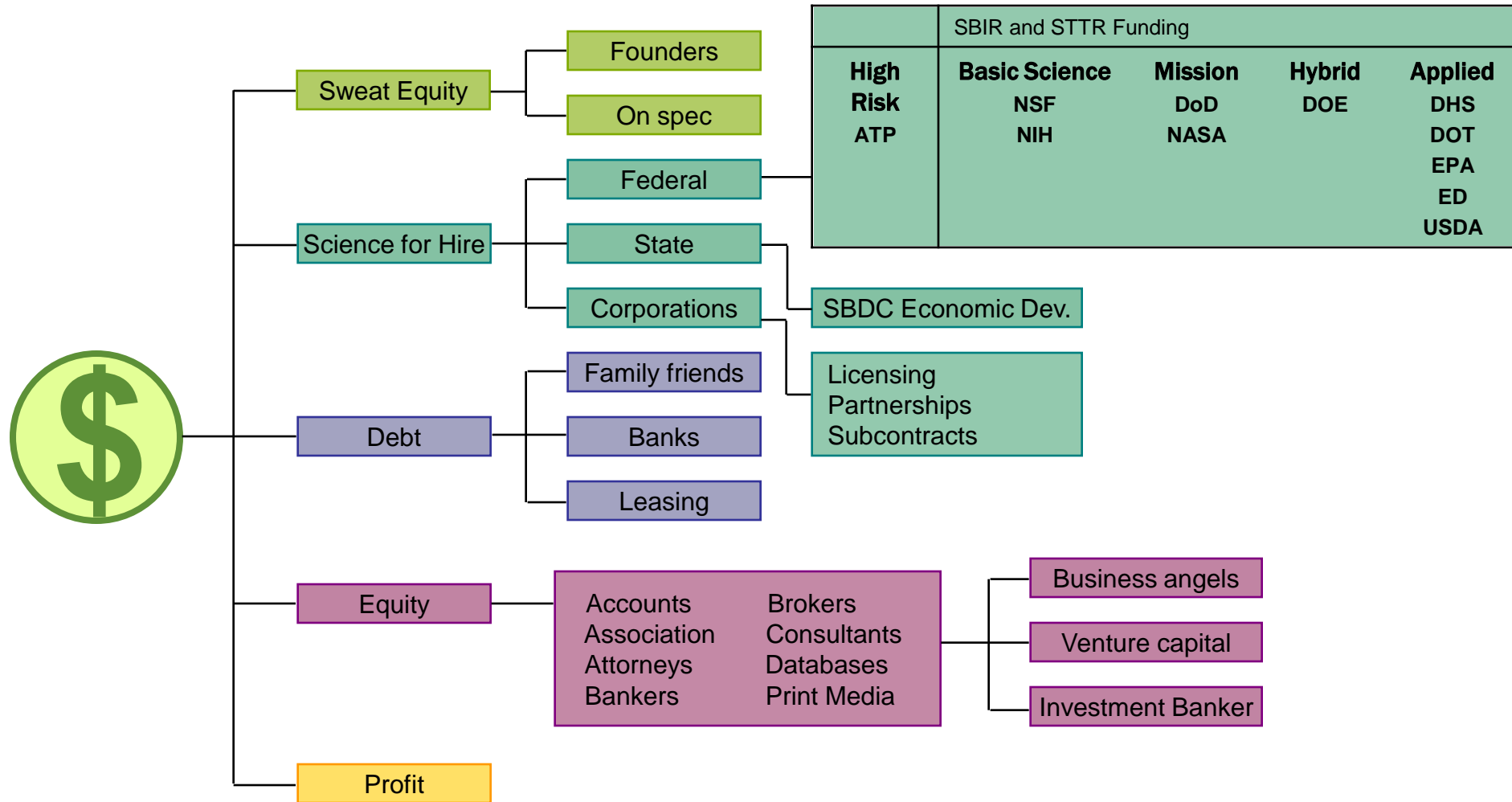
## Milestone

- › Concept development
- › Business case analysis
- › Prototype development
- › Intellectual property protection
- › Beta testing
- › U/L approval
- › Test market introduction
- › Marketing
- › Scale-up of Production

## How funded?

- Phase I SBIR
- G&A
- Phase II SBIR
- Retained earnings
- Corporate partner
- Retained earnings
- ???
- ???
- ???

# Financing Roadmap





# 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 which effect your commercialization strategy

- » **Mission**
- » **Vision**
- » **Business philosophy**
- » **Your current situation**
- » **Window of opportunity**
- » **Competitors**



# 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

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



# Business Philosophy

- » I don't want to give up 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



# 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 dev                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
- › Prototype development
- › Production introduction
- › Market penetration

Sweat equity

Science for hire

Private placement

Debt financing from equity investors



# Sample Strategy - IPO

- » **Vision:** High potential venture
- » **Philosophy:** I want to try it all
- » **Financing options:**
  - › Concept development      Federal funding
  - › Prototype development      Seed financing from angels
  - › Market test      Retained earnings
  - › Market introduction      Equity - Fortune 500 company
  - › Scale-up      Second round financing from VC
  - › New facility      Private placement
  - › Expansion      Line of credit, profits
  - › Market penetration      IPO



» Spin-off » Joint venture » Equity investment	» Joint R&D » Licensing » Strategic Alliance » Equity investment	More ↑ \$ Required ↓ Less
» Bootstrap » Angel investment » Debt Financing	» Partnerships » Licensing » Angel investment	

Few ← \$ Required → Many



Business Plan Outline

# BACK TO THE PLAN



# Business Plan Outline

- Executive Summary
- Company & Technology
- Industry Overview
- Customers
- Market
- Competitors
- Marketing/Sales Plan
- R&D Plan
- Manufacturing/Engineering Plan
- Human Resource Plan
- Contingencies
- Financials



# 1. Executive Summary

- **Need**
- **Your solution**
- **Market Opportunity**
- **Competitors**
- **Company & background**
- **Management Team**
- **Investment Highlights**



## 2. Company & Technology

- **2.1 Brief company introduction**

- Mission
- Location, size, history
- Overview of company capabilities
- Customers & past performance

- **2.2. Technology**

- Brief description
- Applications

- **2.3. Product/Service**

- Brief description
  - 2.3.1. Intellectual property status

- **2.4. Commercialization strategy (brief)**



# 3. Industry Overview

- **3.1 Industry definition and description**
  - New products and developments within industry
  - Major players within the industry, factors driving dynamics
- **3.2. Legislation and policies driving the industry**
  - Future and historical trends



# 4. Customers

- **4.1. Customers and end-users**
  - Need addressed by the technology/product/service
  - How the need is currently filled
  - Features, advantages, benefits; price point
  - Who has the need? Differentiate between end-users and customer needs
  - Distribution channels used
- **4.2. Buying behavior**
  - Decision makers
    - Who makes the decision to buy
    - Who makes the purchase decision
    - Characteristics of decision makers
  - Basis for purchase decisions
    - Frequency of purchase decisions
    - Basis for purchase decisions



# 5. Market

- **5.1. Market definition**
  - 5.1.1. Primary market
  - 5.1.2. Secondary markets
- **5.2. Market size and trends - primary market**
  - Current total and served available markets
  - Predicted annual growth market



Market Build Up Method

# ANOTHER DIGRESSION



# Estimating size of emerging markets

- **It always starts with a need**
- **Identify the type of person or entity that has the specified need**
- **Can you find statistics related to this need or a surrogate**
- **Apply assumptions filter -**  
**Money, Access, Desire (MAD)**



# Hypothermia suit- stranded motorist



- **Who has this need?**



## Road not taken...

- **Count occurrences of hypothermia**
  - Doesn't occur that often
  - Product addresses fear of hypothermia, not actual occurrence



## STEP 1 in deriving market potential

- **US Statistical abstracts**
- **Car registrations - Cold climates**
  - Result 67,611,000 motor vehicle registrations
  - Would it be correct to assume that all of these would be customers for a hypothermia suit?



## STEP 2 in deriving market potential

- How many would have a desire for such a product
  - What % have emergency gear already
    - Triple A
    - Emergency gear catalog
    - Mall intercept
      - 10% indicated that had some sort of emergency gear - flares, blankets
- Apply filter to previous number
  - 10% of 67,611,000 = 6,761,000
- Is this an adequate estimate of need?



## STEP 3 in deriving market potential

- **Do they have the money?**
  - How much will the product cost?
  - What is the customer's price point?
  - Starting price assumption \$25.95
- **Car registrations by income level**
  - Assumption - income over \$35K would find this to be of interest
  - 45% of sample
- **Apply filter**
  - $6,761,000 \times 45\% = 3,042,450$



## STEP 4 in deriving market potential

- **Consider how you will market**
  - Marketing communications determines “Access”
  - Determine how customers obtain info about new products
  - Market through catalogs
    - Industry experts indicated 40% of this group are likely to purchase through catalogs
  - Apply filter
    - $3,042,450 \times 40\% = 1,216,980$  units



## CONCLUSION

- **Estimated market size for hypothermia suite for stranded motorists is**
  - 1,216,980 units
  - \$31,580,631
- **Other potential markets: military, oil rigs**
  - Product redesign required
  - Multiple use and repackaging



# BACK TO THE PLAN



# 6. Competitors

- **6.1. Indirect competitors**
- **6.2. Direct competitors**
  - Who are they?
  - Strengths & weaknesses
  - Market share of competitors
- **6.3. SWOT analysis**



# 7. Marketing/Sales Plan

- 7.1. Opportunity statement
- 7.2. Marketing & sales objectives
- 7.3. Current customers, if appropriate
- 7.4. Potential customers
  - Customers targeted for intensive selling efforts
  - How other customers will be identified and qualified
  - Product features emphasized and contrasted with competitors
- 7.5. Pricing
  - Basis for targeted price point
  - Margins & levels of profitability at various levels of production & sales



## 7.6 Sales plan

- Sales force analysis (reps, distributors, direct)
- Sales expectations for each salesperson & each distribution channel
- Margins given to intermediaries
- Service and warranties
- Organizational chart for sales/marketing staff, indicating planned growth for 3-5 years
- **7.7. Advertising**
  - Year 1 - Detailed Marketing Communications plan
  - Year 2-5 (more general)
- **7.8 Sales/Marketing Budget**
  - Assumptions



## 8. R&D Plan

- **8.1. R&D objectives**
- **8.2. Milestones and current status**
  - What remains to be done to make the product marketable?
- **8.3. Difficulties and risks**
- **8.4. Staffing**
- **8.5. R&D budget**
  - Assumptions



# 9. Manufacturing/Engineering Plan

- **9.1. Objectives**
- **9.2. Use of subcontractors**
- **9.3. Quality control**
- **9.4. Staffing**
- **9.5. Manufacturing/Engineering budget**
  - Assumptions



# 10. Human Resource Plan

- **10.1. Staffing objectives**
- **10.2 Organizational structure -**  
phased over 3 - 5 years
  - Introduction of management team
  - Key individuals to be recruited and plans for doing so
  - Board of Directors, Advisory Board
  - Incentives for commitment
- **10.3. Human Resource Budget**
  - Assumptions



# 11. Contingencies

- **11.1. Potential risks**
  - Impact and responses



# 12. Financials

- **12.1. Financial objectives**
  - Commercialization strategy
  - Use of funds
  - Terms & conditions of any previous financing arrangements
- **12.1. Plans for obtaining investors or strategic alliance**
  - Profile of investor or partner sought
  - Leveraging advantage for investor/partner
  - Detailed plans for obtaining investor/partner
  - Costs and time associated with securing investor/partner



## 12.3 Pro Forma Profit and Loss statements

- **12.4. Pro Forma Cash Flow Projections**
- **12.5 Pro Forma Balance Sheet**
- **12.6. Alternative return scenarios**
  - Exit scenarios



# Appendices

- Analysis of potential teaming partners
- Patent information
- Detailed market surveys
- Customer endorsements
- More detailed technical information
- References
  - Bibliography
  - Industry experts consulted



# How to Use the Plan

- **Don't give out readily - pre-qualify potential strategic allies/partners**
- **Ask them to sign a Confidentiality Agreement - not all will**
- **Number plans**
- **“Do not copy, do not forward”**
- **Return in 30 days**



# How to Use the Plan - Internal

- **Make presentation to your team**
- **Review operational plans with frequency**
- **Gauge actual performance against objectives**
- **Living document**
- **Update annually**