“An ‘out’ box AND ‘in’ box? Hey, I don’t need that kind of stress”

Henry Nowak
School of Global Public Health
March 25, 2013
RESEARCH DECISION TREE

IS THERE IP?
- Y
- N

WILL IT MAKE MONEY?
- Y
- N

DO WE DO ECONOMIC DEVELOPMENT?
- Y
- N

DO WE DO SERVICE?
- Y
- N

OUTCOME
- LOADS
- NOT MUCH

OUTREACH
- LICENSE
- VENTURE DEVELOPMENT = START-UP
- ECONOMIC DEVELOPMENT = ECONOMIC BENEFIT
- SOCIAL RESPONSIBILITY

STOP
TWO RESEARCH UTILIZATION PATHS

UNIVERSITY RESEARCH HAS TWO COMMERCIAL PATHS

PARTNER WITH ESTABLISHED ENTITY

IP IDENTIFICATION & DEVELOPMENT
NEGOTIATE LICENSE
THE GAP
TECHNOLOGY DEVELOPMENT
START-UP GAP $
EARLY VENTURE
MATURE VENTURE

START A COMPANY

VENTURE DEVELOPMENT PROCESS REQUIRES BRIDGING THE GAP

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COMMERCIALIZATION GAP EXISTS BETWEEN RESEARCH AND PRODUCTS

STAGE
UNIVERSITY RESEARCH
TECHNOLOGY DEVELOPMENT
EARLY VENTURE DEVELOPMENT
MATURE VENTURE DEVELOPMENT

THE GAP

COMMERCIALIZATION GAP EXISTS BETWEEN RESEARCH AND PRODUCTS

The Valley of Death

Center for Innovation Management Studies

Level of Development

Resources

Discovery Early Development Commercialization

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PATENT PROCESS

Filing  Conversion  Go National  Issue

Grace Period  Validate & Valuate  Patent Prosecution

*With EPO, JP national phase filings
LICENSE TO ESTABLISHED ENTITY

- Identify early IP
- Filing Decision
- Define Product/Market
- ID Potential Customer
- Initial Contact
- Negotiate Terms
- Draft Agreement
- Monitor Diligence
- Collect Payments
- University Distribution
Buck up Sparky... You’ll blow our negotiating posture!
A START-UP IS NOT A HOBBY!
START-UP

IDEA GENERATION

IP?

IDEA EVALUATION

OTD SWEET SPOT & THE GAP

SET UP

PLAN FIRST!

START UP

OPEN for business

GROW

MILESTONES?

EXPANSION?

EXIT

“IPOSSIBLE” PRODUCT IDEA OR UNMET MARKET NEED

IDEA

CAPITAL

PEOPLE

FUNCTIONAL & FINANCABLE BUSINESS ENTITY

FEASIBILITY?

BUSINESS PLAN?

ANSWER 4 QUESTIONS

What are we going to do?

How are we going to do it?

Why does anybody care?

How will it make money?

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TARGET MESSAGE

• Story of Success
• Filling a Void in the Market
• We Can Accomplish What we Plan to Do
• Customers Will Buy Our Product
• Everybody Makes Money Within a Reasonable Time

WANT AUDIENCE TO WALK AWAY THINKING
THIS IS A SOLID BET
CHARACTERISTICS OF BUSINESS PLAN

• Communication and Credibility
• Describes Internal/External Elements/Strategies For New Venture
• Presents Plan (Road Map) for Getting from Point A to Point B
• Point A is Now and Idea
• Point B is Sometime in the Future (Usually Fully Functional, Profitable, Steady State)
• Role of Assumptions
# PARTS OF BUSINESS PLAN

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### Communication Principles
- Expectations
- Milestones
- Opportunity
- Context
- Business Plan

### Credibility Principles
- Team
- Elaboration
- Scenario Integration
- Financial Link
- The Deal
BUSINESS PLAN IS THE BEGINNING

• Business Plan is Not Static, It Changes
• Preparing a Business Plan is Iterative Between Assumptions, Financials and Risks
• Business Plan is One in a Series of Analysis, Communication and Reporting Documents
WHICH PATH? REALITY CHECK

• Ideal Start-up
  – No Immediate Licensee
  – Big Potential Return
  – Start-up Champion(S)
  – Flexible, Dedicated Faculty
  – Entrepreneurial Support Network
  – Strong IP & Other Barriers
  – Pathway to Profitability

• Inventor/Founder Considerations
  – Objectivity
  – Conflicts of Interest
  – Motivations & Time Commitment
  – Start-up Role & Management Team & Diminished Control
  – Fundraising
  – Financial Reward
10 ROOKIE START-UP MISTAKES

• Unreasonable/Unmeasureable Goals/Assumptions
• No Total Commitment
• Lack Of Experience
• No Understanding Of Threats Or Weaknesses
• Customer Need Not Established
• Rookie Legal Mistake
• Production Costs/Supply Chain
• Product Not Distinct
• Cash Flow Problems/Pathway to Profitability
• Lack of Flexibility

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He has trouble making decisions.
WHICH PATH? QUESTIONS TO PONDER

• Is there an inquiring, willing & competent receiver of the technology (Opportunity Knocking?)?
• Is the technology ready to sell to customers? Could we find a receiver if we shopped it around?
• What kind of activities are needed to advance it to be customer-ready?
• How much money will it take?
• Is there a start-up champion?
• What is patent status/timeframe?
• What are the risks?
• What are financial forecasts and time to market?
• Are there any non-financial benefits?
STAGES OF FUNDING

- Academic/Research
  - NIH
  - NSF
  - NIAID

- GAP Funding
  - SBIR
  - STTR
  - SBA
  - Friends, Family
  - Personal Loans
  - Angels

- Institutional Funding
  - Private Equity/VC’s
  - Public Equity
  - Acquisitions

- Strong Management Team
- Distinctive Product
- Barriers to Entry
- Path to Breakeven and Profitability

Scientific Merit
PI Reputation

Scientific Merit
Milestones
Company Partner

Character
Collateral
Cash Flow
Contribution of Equity

Contribution of Equity