

Commercializing Technologies

UCSD's Rady School of Management
Technology Workshop I
October 14, 2005

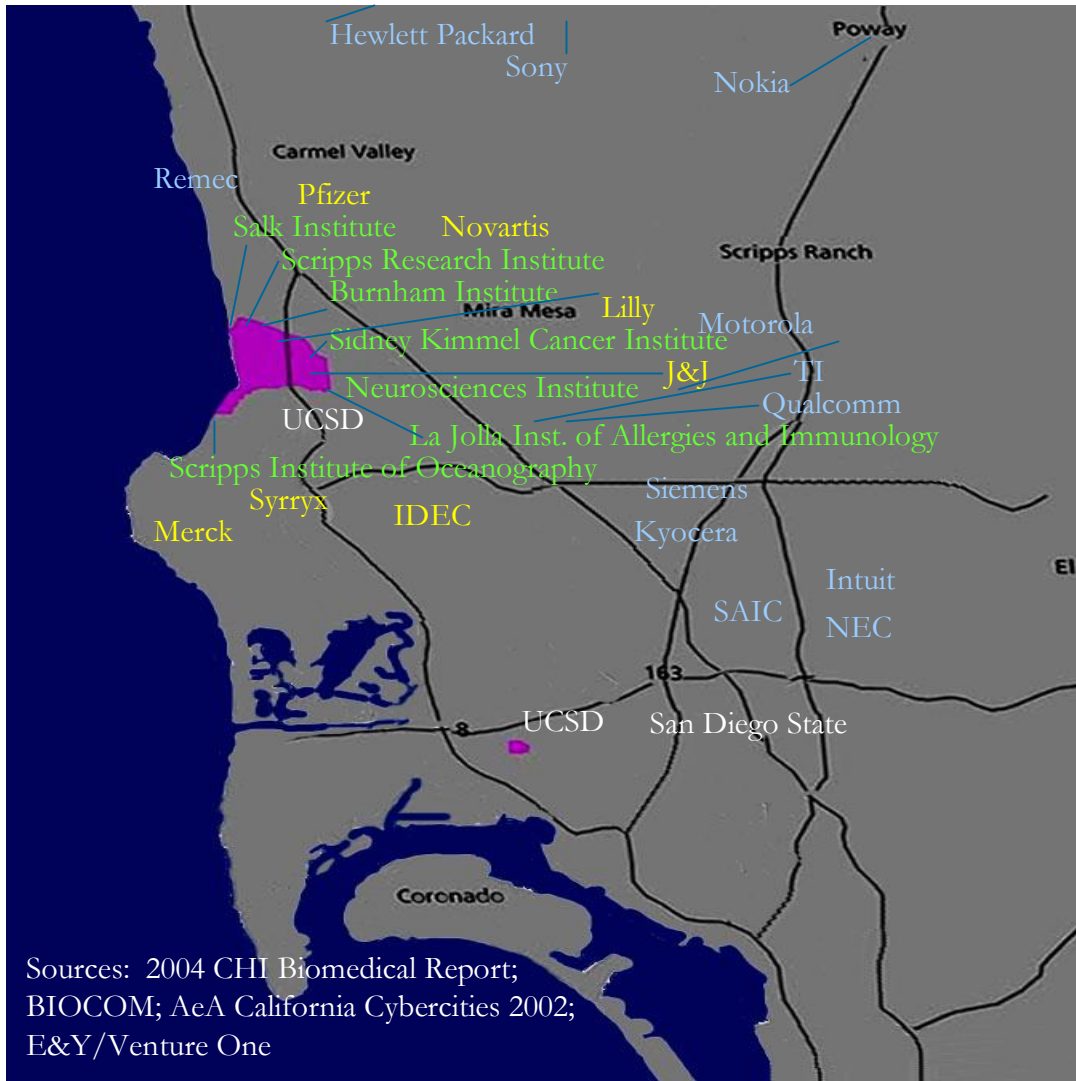
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EPVC - Background

- We invest in disruptive technologies and business models in large, high growth markets
- Investing since 1985 - 6 funds totaling ~\$1.1B
- Largest firm headquartered in Southern CA
- Diversified fund with ~70% IT, ~30% life sciences
- Early stage, CA and SoCal focus
- Deep domain expertise with focus areas including
 - Software, semiconductors, networks, telecom/wireless, digital media/content, biotechnology



Hotbed of opportunity - San Diego, 1995-2005



Sources: 2004 CHI Biomedical Report;
BIOCOM; AeA California Cybercities 2002;
E&Y/Venture One

ACADEMIC RESEARCH

- UCSD, UCI, UCLA, UCR, Caltech within 2 hour radius
- R&D focus on sciences and engineering

LIFE SCIENCES: 1995-2004

- Academic R&D centers up from 4 to 7; 18 in region
- For-profit R&D centers up from 3-7 in SD; 12 in region
- Over 500 companies built
- 28,000+ LS employees
- \$6B in VC money from 1998-Q105
- NIH in 2003 = \$745 M

IT: 1995-2005

- UCSD now 11th ranked engineering school in U.S
- Corporate R&D up from 2 to 12; QUALCOMM & SAIC now huge
- 10x increase in hi-tech companies
- Hi-tech jobs=160 per 1000 private sector jobs in SD vs. 46 per 1000 in U.S.
- \$11B in VC money from 1998-Q105
- Defense R&D back in SoCal

Agenda

- **Commercialization Thought Process**
 - Key questions
 - Analytical focus areas
 - Do's and don'ts
- **Fundraising – Getting it Financed**
 - Options
 - Process
- **Next Steps**
 - Now what?

Commercialization Thought Process

- **There are four key areas to focus your time, energy when assessing a potential technology/business opportunity**
 - How to “sift through the rubble”
- **Market**
 - Size, growth, customers, competitors, product positioning, pricing ...
- **Technology**
 - Functionality, Intellectual Property, uniqueness...
- **Financials**
 - Revenue potential, cash position
- **Management**
 - “It’s the people”

Key Questions - Market

- **What problem does this technology solve?**
- **Who is the customer, and why will they buy this?**
 - “Vitamin or Vicodin”
- **What is the proper way to define/segment the market?**
 - Size, growth drivers, target verticals
- **What is the potential go-to-market and distribution strategy for this product/technology?**
- **What is the competitive landscape?**
 - Incumbents, new entrants, barriers to entry
 - How are you different from a value proposition/competitive positioning perspective?

Key Questions - Technology

- Does the technology do what people say it does?
- Is the technology/approach truly unique and a sustainable differentiator vs. others?
- Is it patent protected/IP defensible?
 - How much is proprietary vs. COTS/open source/commodity?
- Can it scale easily and cheaply with increased usage/customers?
- What is the current and projected product development roadmap to get it to market?
 - Costs, resources, timing

Key Questions - Financials

- **What is the revenue opportunity in current and future markets?**
 - Customer pipeline, sales cycle analysis
- **How should the product(s) be priced and how can pricing be maintained and increased over time?**
 - Set value, not price
- **What are the costs associated with developing the product and a company?**
 - Opex, capex, headcount, R&D, manufacturing, etc.
 - Break even analysis, margin analysis
- **What are the cash needs to get it to sustainable profitability?**

Key Questions - Management

- **What are the short term and longer term HR needs to build a successful company?**
 - Key hires within management
- **Are the founders the right people to run the company?**
 - What are the right roles for the founders and early team?
- **Does the current management team have relevant industry and product experience?**
 - “gray hairs vs. newbies”
- **Should there be an Advisory Board in addition to traditional Board of Directors?**
 - What skills and experiences are highest value for the company?

Financing An Idea/Product

- **Once you decide you have a product that you would like to take to market, you are likely to need funding**
- **Range of financing options**
 - Bank loan, venture debt, venture capital, bootstrap
- **Venture capital is expensive money, but provides additional value added services**
 - Relationships, strategy, board guidance, hiring, etc.
- **Venture financing tips**
 - Use referrals to make an intro to a VC firm, no cold calls
 - Make people decisions, not money decisions
 - Have a well developed executive summary, business plan before initial meeting
 - EPVC Download - Business Plan Structure
<http://www.epvc.com/pdfs/EPVCBizPlan3.pdf>

Summary

- **Invest significant initial time analyzing the potential product/business opportunity**
 - Market, Technology, Financials, Management
- **Be creative and think “out of the box,” but be realistic**
 - Push the thinking and get perspective from others
 - Don’t throw “good money after bad” (or more time into something that is likely to fail)
- **If the technology/idea passes your analysis filter, then prepare an executive summary and business plan**
 - Use business plan to obtain funding, hire team, build a board, develop partnerships, etc.
- **Be selective in your financing strategy and partner with those who are “true believers” and will grow with your company**