How Venture Capitalists Assess Healthcare Information Technology Business Plans

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The Substance

Key Issues

- The Market
- The Management
- The Method
- The Money
- The Metrics
Venture Capital Deal Flow

Business Plans Received

Projects Evaluated

Projects Funded
Key Triage Factors

- Management Pedigree
- Deal Source
- Process Management
- Customer Validation
- Adherence to Plan
Key Focus Areas

- Major Risk Factors
- Obvious Show Stoppers
- Better, Faster, Cheaper, or Brave New World
Major Risk Factors

- Technological
- Market
- Regulatory
- Operational
Market

- **Macro**
  - Size
  - Growth Rate
  - Concentration
  - Barriers to Enter

- **Micro**
  - Economics (Pricing, Operating Margins)
  - Customers
  - Segmentation
Methodology

- Business Model
- Value Proposition
- Distribution Strategy
- Competitive Differentiation
- Growth Strategy
- Technology
Management

- Vision
- Experience (Quality, Quantity, Relevancy)
- Education
- Track Record
- Capability
Money

- Financial Strategy
- Capital Requirements
- Structure
- Valuation
- Liquidity Path
- Use of Proceeds
Numbers

- Income Statement
  - Revenue Projections ($, Units, Average Sale Price)
  - Expense Projections (Head Count, Salary Level, Corporate Overhead)
  - Margins (Gross, Operating)

- Balance Sheet
  - Cash
  - Accounts Receivable
  - Inventory
  - Goodwill/Intangibles
  - Debt
  - Liabilities
- Cash Flow
  - Operating
  - Financing
- Budget
- Capitalization Table
  - Investors
  - Management
  - Option Pool
The Process

- Business Plan Review
- Management Presentation
- Site Visit(s)
- References
- Competitive Analysis
- Financial Analysis
- Corporate Review
- The Deal
Business Plan Review

- Form
- Substance
- Vision
- Business Model
- Marketing Plan
- Technology Plan
- Financial Plan
# Venture Capital Glossary

<table>
<thead>
<tr>
<th>What We/They say…</th>
<th>and What We/They Really Mean…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition Strategy</td>
<td>the current products have no market</td>
</tr>
<tr>
<td>Adverse Customer Selection</td>
<td>existing customers can’t stand the product; no positive customer references</td>
</tr>
<tr>
<td>Basically on plan</td>
<td>revenue shortfall of 25 percent</td>
</tr>
<tr>
<td>Dotcom business model</td>
<td>potentially bigger fools have been identified</td>
</tr>
<tr>
<td>Considerably ahead of plan</td>
<td>hit plan in one of the last three months</td>
</tr>
<tr>
<td>Currently revisiting the budget</td>
<td>financial plan is in total chaos</td>
</tr>
<tr>
<td>Cyclical industry</td>
<td>posted a huge loss last year</td>
</tr>
<tr>
<td>Entrepreneurial CEO</td>
<td>totally uncontrollable, bordering on maniacal</td>
</tr>
<tr>
<td>Funding Interruption</td>
<td>existing investors tapped out and unwilling to provide additional funding</td>
</tr>
<tr>
<td>Ingredients are there</td>
<td>given two years we might find a workable strategy</td>
</tr>
<tr>
<td>Investing heavily in R&amp;D</td>
<td>trying desperately to catch the competition</td>
</tr>
<tr>
<td>Limited downside</td>
<td>it can’t get much worse</td>
</tr>
<tr>
<td>What We/They say…</td>
<td>and What We/They Really Mean…</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Long selling cycle</td>
<td>yet to find a customer who likes the product</td>
</tr>
<tr>
<td>On a manufacturing learning curve</td>
<td>can’t make the product with positive margins</td>
</tr>
<tr>
<td>Possibility of a slight shortfall</td>
<td>a revenue shortfall of 50 percent</td>
</tr>
<tr>
<td>Repositioning the business</td>
<td>multimillion-dollar investment recently written off</td>
</tr>
<tr>
<td>Somewhat below the plan</td>
<td>revenue shortfall of 75 percent</td>
</tr>
<tr>
<td>Too early to tell</td>
<td>results to date have been grim</td>
</tr>
<tr>
<td>Turnaround opportunity</td>
<td>lost cause</td>
</tr>
<tr>
<td>Unique</td>
<td>no more than six competitors</td>
</tr>
<tr>
<td>Upgrading the management team</td>
<td>the organization is in complete disarray</td>
</tr>
<tr>
<td>Window of opportunity</td>
<td>without more money, the company is dead</td>
</tr>
<tr>
<td>Work closely with the management</td>
<td>talk to them on the phone once a month</td>
</tr>
</tbody>
</table>
Pipeline Qualification

- **Suspect:** A potential Prospect
- **Prospect:** A Suspect with whom contact has been made
- **Qualified Prospect:** A potential Customer with budget actively seeking a solution
- **Customer:** A contractually committed financially viable client
Technology Review

- Technology
  - Architecture (web-enabled or web-centric) thick versus thin client
  - Operating System
  - Relational Database
  - Application Code
  - Development Environment
Technology Review (continued)

- Resources
  - Budget
    - Cap Ex
    - Development
    - Operating
    - Maintenance
  - Staff
    - External
    - Internal
Technology Review (continued)

- Track Record
  - Finance
  - Development
  - Experience
Technology Review (continued)

- Function
  - Publish
  - Interact
  - Transact
  - Transform
Technology Review (continued)

- Development Semantics
  - Pre-alpha
    - A concept in someone’s mind
  - Alpha
    - Works only in development laboratory
  - Beta
    - Installed in production environment, partial feature/function complete
  - First Customer Release
    - Debugged, defined feature/function shipping to paying customers
Management Presentation

- Articulation
- Cogent Strategy
Site Visit

- Headquarters
- Outlets
- First Impression
- Organizational Culture
References

- Management: Former employer(s), bosses, peers, direct reports, board members, advisors, competitors, analysts
- Customers: Current, former, prospective
- Company: Auditor, legal, bank, investors
Competitive Analysis

- Market Share
- Mind Share
- Momentum
- Differentiation
- Buyer Motivation - Painkiller or Vitamin?
- Sales Cycle
- Pricing
Pricing

■ Traditional
  ➔ Software License Fee
  ➔ Annual Maintenance

■ Emerging
  ➔ Subscription
  ➔ Transaction Based
Valley of Death

Gross Margin

Average Sale Price

< $1.5K  > $250K

SV Life Sciences®
ASP Pricing Model

Organization Size/Financial Resources

Financial Barrier To Adoption

Market
Financial Analysis

- Actual vs. Plan
- Sales Pipeline
- Leverage (Operating, Financial)
- Competition (Margin, R&D, Distribution, ASP, Corporate)
- Valuation
- Return ($, IRR)
Corporate Review

- Audit and Management Letter
- Legal (Lawsuits, Licensing, Agreements, Distribution Agreements, Employee Agreements, Employee Benefits, Shareholder Agreements, Stock Options, Financing Agreements, Stock Ledger, Customer Contracts, etc.)
- Regulatory (Licenses, FDA, Environmental)
- Intellectual Property (Patents, Copyrights, Trademarks)
- Insurance (Liability, Key Man, D&O, E&O)
- Leases (Real Estate, Capital Equipment)
The Deal

- Term Sheet
- Legal Representation
- Document Preparation
- Closing
- Post-Closing Review
Tips

- Dos:
  - Conduct site visits of corporate and regional offices’ arrive early
  - Tour with junior (non-management) staff
  - Meet with worker bees
  - See production environment
  - Ask lots of questions
Tips

- **Don’ts:**
  - Mistake development for production
  - Visit only corporate site and staff
  - Discuss anything in elevators or bathrooms
  - Leave your files unattended
  - Sign the visitor log
  - Lead the witness
  - Volunteer competitive information
  - Breach moral/written obligation of confidentiality
Human Capital Assessment
Venture Techniques

- Art Critic
- Sponge
- Prosecutor
- Airline Captain
Management Orientation

- Missionary
- Mercenary
## Management Attributes

<table>
<thead>
<tr>
<th>STAGE</th>
<th>FOCUS</th>
<th>KEY ATTRIBUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up</td>
<td>Development</td>
<td>Passion, Vision</td>
</tr>
<tr>
<td>Early</td>
<td>Entry/Pilot</td>
<td>Persistence, Tenacity</td>
</tr>
<tr>
<td>Expansion</td>
<td>Adoption</td>
<td>Process, Systems</td>
</tr>
<tr>
<td>Late</td>
<td>Penetration</td>
<td>Profits</td>
</tr>
</tbody>
</table>
Health Care Drivers

- Aging Demographics
- Scientific Innovation
- Consumerism
- Cost Escalation
Health Care I/T

- **Market**
  - **Size:** Healthcare $1.7T (13.8% GDP) 7% CAGR
  - Healthcare IT $25B; 12% CAGR

- **Entities:** Health Plans (500)
  - Hospitals (5,000)
  - Nursing Homes (20,000)
  - MDs (650,000)
  - RNs (2,200,000) est.
Health Care I/T

- Clinical
- Administrative
- Financial

FUNCTION

- Data Capture
- Transaction Processing
- Data Base
- Decision Support
Health Care I/T

- High Potential Opportunities
  - Pharmaceutical Services
    - E-detailing
    - Clinical trial management (Phase Forward)
  - Clinical Systems
    - Electronic medical record
    - Image management (EMed Technologies)
    - Medication management
    - Remote physiological monitoring
  - Employee Benefits
    - Consumer driven
  - Supply Chain Management
    - Exchanges
Health Care I/T

Barriers to Adoption

➤ Structural
  » Fragmentation
  » Decision process

➤ Economic
  » Cost benefit ROI — Increased revenue
     Reduced time
     Reduced cost
  » Macro – reimbursement
  » Micro – margins
Health Care I/T

Barriers to Adoption (continued)

- Operational
  - Work flow integration

- Technological
  - Legacy system integration
  - Standards: Articulation
    - Compliance

- Regulatory
  - HIPPA

- Adoption rate
  - Crossing the Chasm
Innovation Adoption – Life Cycle
Adoption

Drivers
- Economic
- Regulatory
- Psychological
- Demand

Enablers
- Financial
- Regulatory
- Technological
- Standards
Disruptive Technology

Technology Paradigm Shift:

- Moore’s Law (Speed/Cost Inverse Relationship)
- Metcalfe’s Law (Network Effective)
# Technology Evolution - Network

<table>
<thead>
<tr>
<th>Time Period</th>
<th>1960s</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Architecture</strong></td>
<td>Proprietary (SNA)</td>
<td>Non-proprietary-packet (TCP/IP)</td>
<td>Academic</td>
<td>Government</td>
<td>Commercial</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
<td></td>
<td>KB</td>
<td>MB</td>
<td>GB</td>
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<tr>
<td><strong>Connectivity</strong></td>
<td>Wired Copper</td>
<td>Fiber</td>
<td>Wireless-Analog</td>
<td>Digital</td>
<td></td>
</tr>
<tr>
<td><strong>Switches</strong></td>
<td>Analog</td>
<td>Digital</td>
<td>Optical</td>
<td></td>
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</tr>
<tr>
<td><strong>Content</strong></td>
<td>Voice Data</td>
<td>Graphic-Static</td>
<td>Dynamic</td>
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[SV Life Sciences Logo]
## Technology Evolution - Hardware

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</thead>
<tbody>
<tr>
<td><strong>Mainframe</strong></td>
<td>Mainframe</td>
<td>Mini</td>
<td>PC</td>
<td>Laptop</td>
<td>PDA</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Workstation</td>
<td>Server</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Disc</td>
<td>Floppy, 5¼</td>
<td>3½</td>
<td>CD</td>
<td>RAID</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>Mag Tape</td>
<td></td>
<td>GB</td>
<td>RAID</td>
<td>SAN</td>
</tr>
<tr>
<td><strong>I/O</strong></td>
<td>KB</td>
<td>MB</td>
<td>GB</td>
<td>TB</td>
<td>Fiber Channel</td>
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<tr>
<td><strong>Architecture</strong></td>
<td>4 bit</td>
<td>8 bit</td>
<td>16 bit</td>
<td>32 bit</td>
<td>CMOS</td>
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<tr>
<td><strong>Speed</strong></td>
<td></td>
<td></td>
<td></td>
<td>GHz</td>
<td>CMOS</td>
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<tr>
<td><strong>Type</strong></td>
<td>IC</td>
<td>Micro RAM</td>
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# Technology Evolution - Software

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<th>1960s</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
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</thead>
<tbody>
<tr>
<td><strong>Language</strong></td>
<td>Proprietary</td>
<td>Open Source</td>
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<tr>
<td><strong>Code</strong></td>
<td>Machine Assembler</td>
<td>Compiled 1st 2nd 3rd</td>
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<tr>
<td></td>
<td>(Binary)</td>
<td>(Basic)</td>
<td></td>
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</tr>
<tr>
<td><strong>Platform</strong></td>
<td>Machine Specific</td>
<td>Intra-operative</td>
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<tr>
<td><strong>Data Base</strong></td>
<td>Non-Relational</td>
<td>Relational</td>
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<tr>
<td><strong>Structure</strong></td>
<td>Proprietary (ISAM/VSAM)</td>
<td>Non-Proprietary ASCII</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Architecture</strong></td>
<td>Mainframe Mini</td>
<td>Client Server 2 Tier 3</td>
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<tr>
<td></td>
<td></td>
<td>Tier</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>Text</td>
<td>Graphics Voice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td>Character Punch Card</td>
<td>Graphic Floppy</td>
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</tr>
<tr>
<td></td>
<td>Mag Tape</td>
<td>CD</td>
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