

# **How Venture Capitalists Assess Healthcare Information Technology Business Plans**

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# The Substance

## ■ Key Issues

↘ The Market

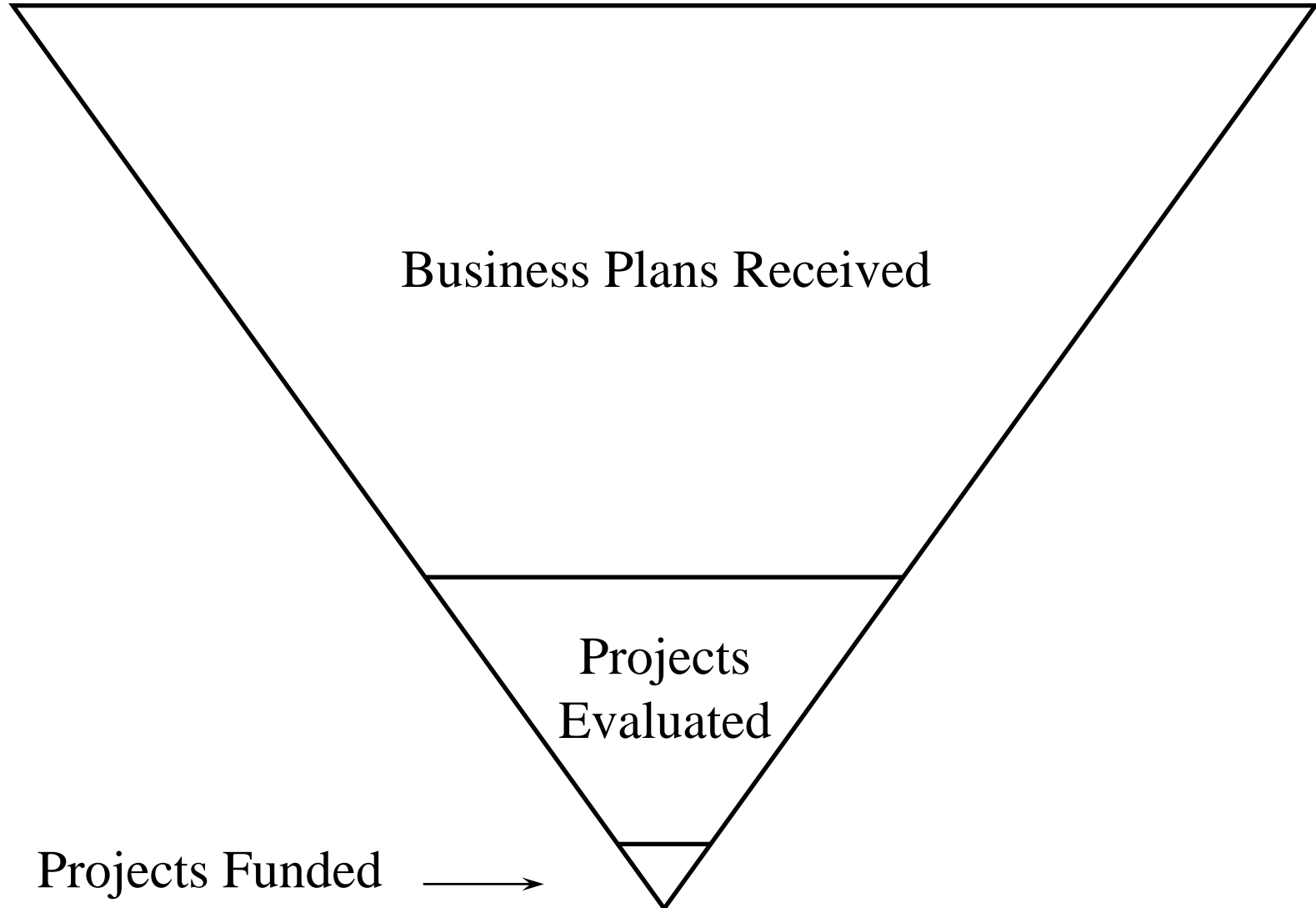
↘ The Management

↘ The Method

↘ The Money

↘ The Metrics

# Venture Capital Deal Flow



# 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

**What We/They say...**

**and What We/They Really Mean...**

Acquisition Strategy

the current products have no market

Adverse Customer Selection

existing customers can't stand the product; no positive customer references

Basically on plan

revenue shortfall of 25 percent

Dotcom business model

potentially bigger fools have been identified

Considerably ahead of plan

hit plan in one of the last three months

Currently revisiting the budget

financial plan is in total chaos

Cyclical industry

posted a huge loss last year

Entrepreneurial CEO

totally uncontrollable, bordering on maniacal

Funding Interruption

existing investors tapped out and unwilling to provide additional funding

Ingredients are there

given two years we might find a workable strategy

Investing heavily in R&D

trying desperately to catch the competition

Limited downside

it can't get much worse

# Venture Capital Glossary...

## What We/They say...

Long selling cycle

On a manufacturing learning curve

Possibility of a slight shortfall

Repositioning the business

Somewhat below the plan

Too early to tell

Turnaround opportunity

Unique

Upgrading the management team

Window of opportunity

Work closely with the management

## and What We/They Really Mean...

yet to find a customer who likes the product

can't make the product with positive margins

a revenue shortfall of 50 percent

multimillion-dollar investment recently written off

revenue shortfall of 75 percent

results to date have been grim

lost cause

no more than six competitors

the organization is in complete disarray

without more money, the company is dead

talk to them on the phone once a month



# 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

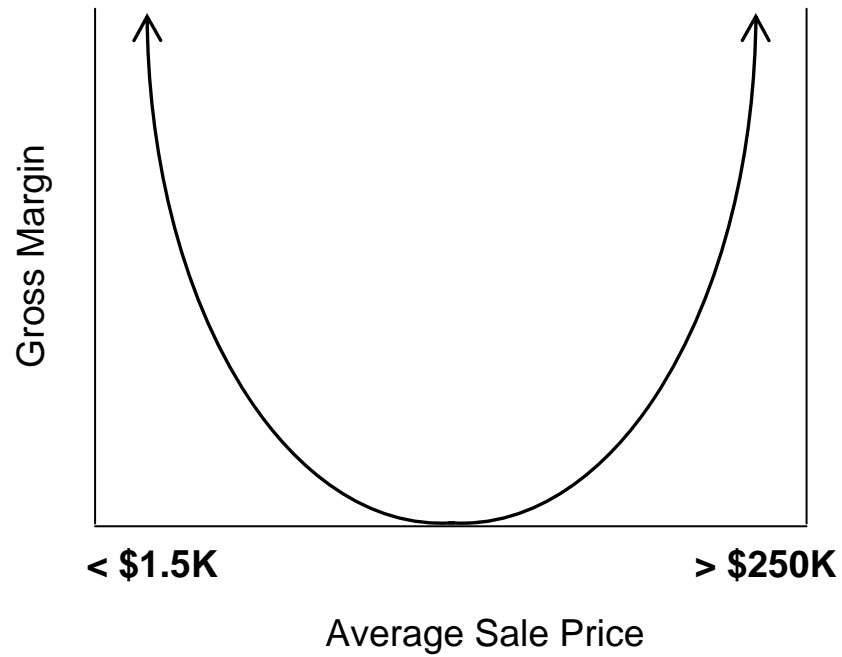
↳ Annual Maintenance

## ■ Emerging

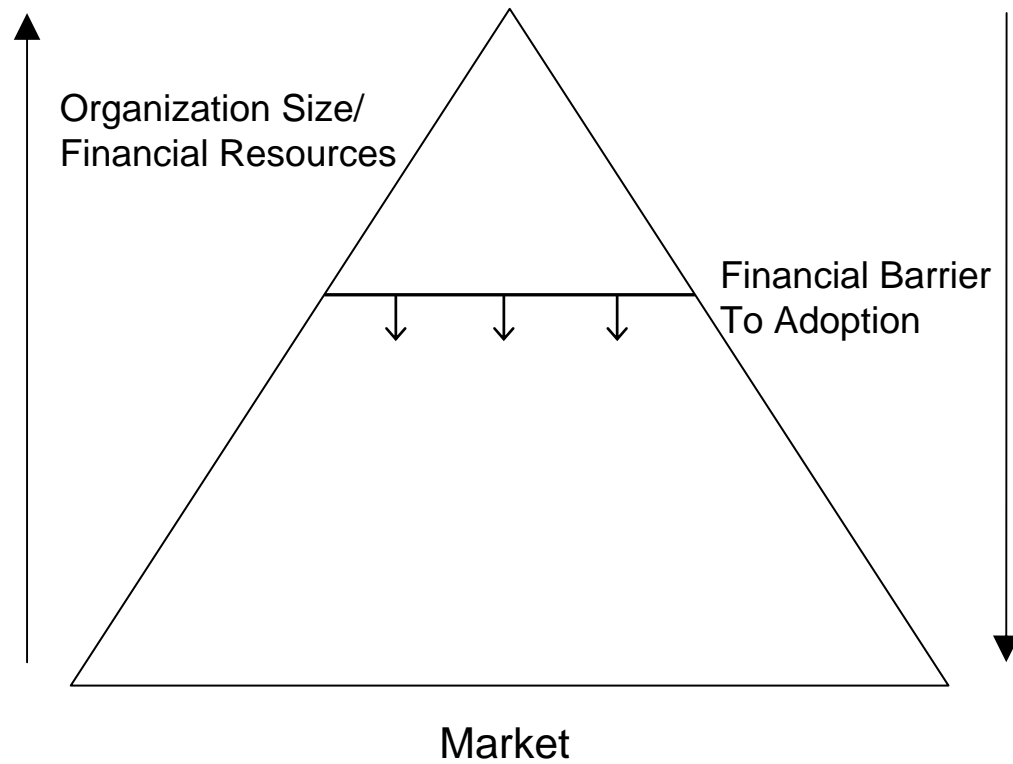
↳ Subscription

↳ Transaction Based

# Valley of Death



# ASP Pricing Model



# 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

## STAGE

- Start-up
- Early
- Expansion
- Late

## FOCUS

- Development
- Entry/Pilot
- Adoption
- Penetration

## KEY ATTRIBUTES

- Passion, Vision
- Persistence, Tenacity
- Process, Systems
- Profits

# 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**

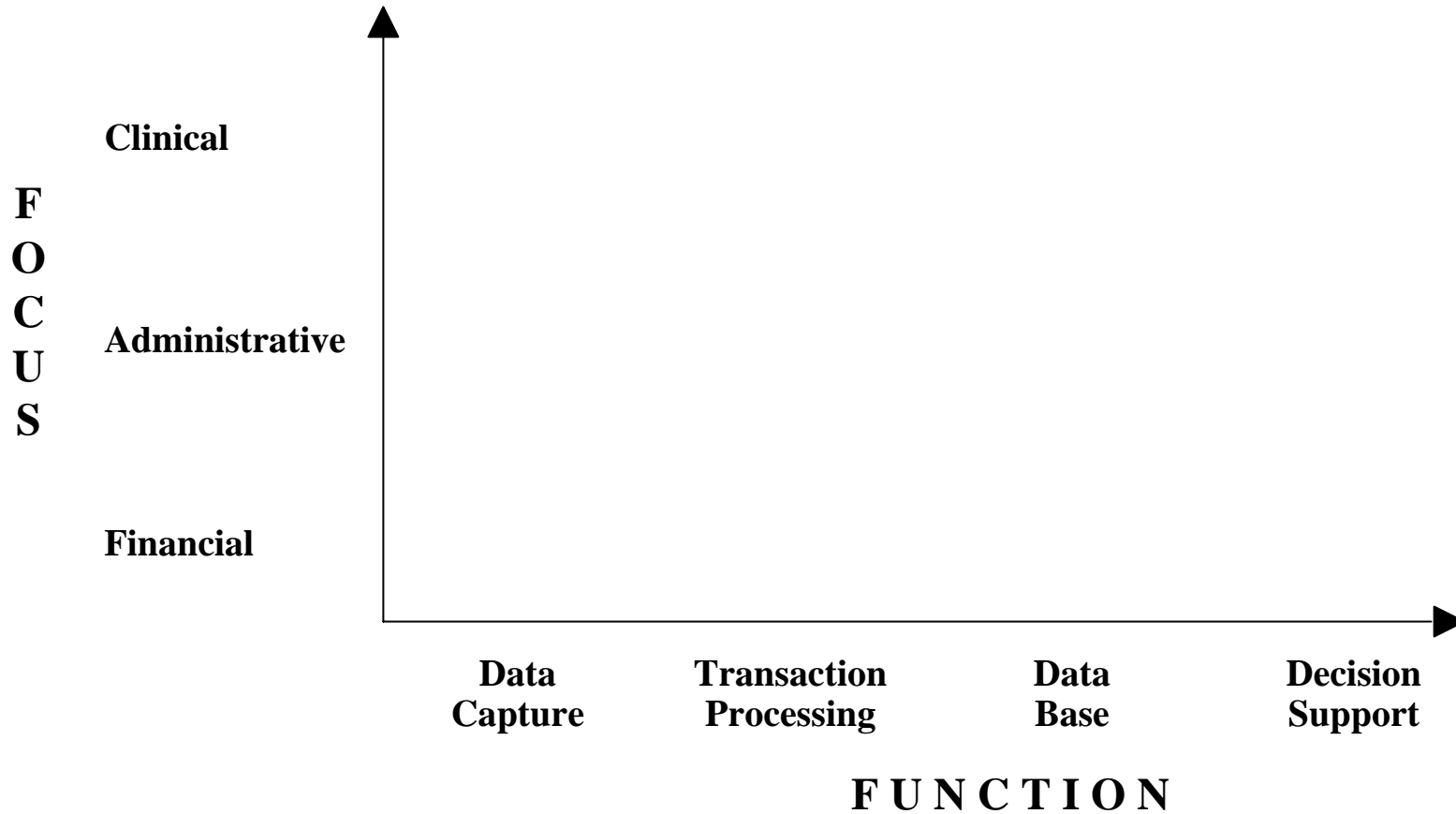
↘ **Entitles:** **Health Plans (500)**  
**Hospitals (5,000)**  
**Nursing Homes (20,000)**  
**MDs (650,000)**  
**RNs (2,200,000) est.**

# Stimulus Bill

- **Funding: \$20B**
- **Recipients: Hospitals/MD's**
- **Purpose: EHR Adoption**
- **Mechanism: Add on to fee service payments**



# Health Care I/T



# 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

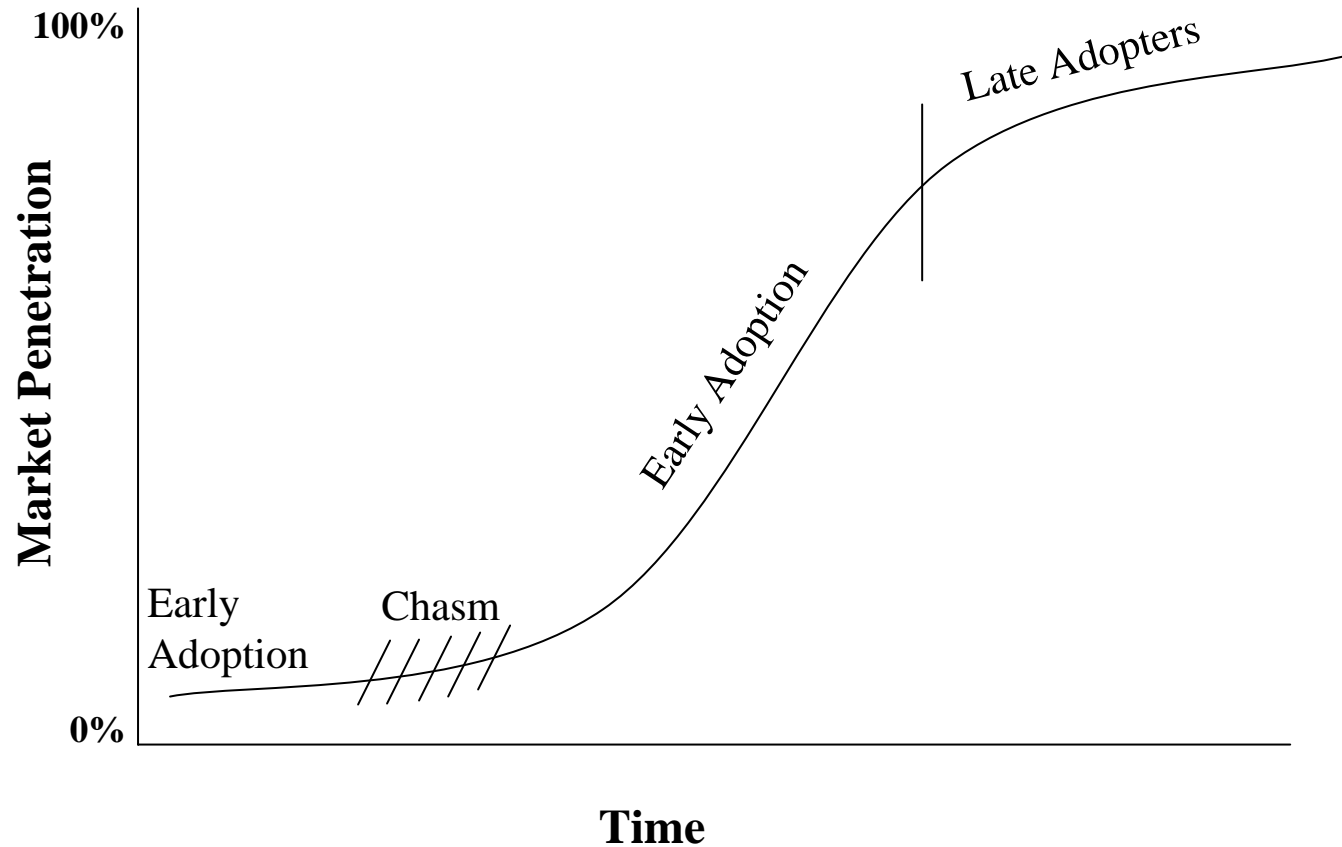
### ↳ Regulatory

- » 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

	1960s	1970s	1980s	1990s	2000s
<u>Architecture</u>	Proprietary (SNA)	Non-proprietary-packet (TCPIP)	Academic Government	Commercial	
<u>Speed</u>		KB	MB	GB	
<u>Connectivity</u>	Wired Copper	Fiber	Wireless-Analog	Digital	
<u>Switches</u>	Analog	Digital		Optical	
<u>Content</u>	Voice Data		Graphic-Static	Dynamic	



# Technology Evolution - Hardware

	1960s	1970s	1980s	1990s	2000s
<b><u>Platform</u></b>	Mainframe	Mini	PC Workstation	Laptop Server	PDA
<b><u>Storage</u></b>	Media Capacity I/O	Disc Mag Tape KB	Floppy, 5 ¼ 3 ½ MB	CD RAID TB	SAN Fiber Channel USB
<b><u>Processor</u></b>	Architecture Speed Type	4 bit Micro RAM	8 bit	16 bit MHz	32 bit GHz CMOS

# Technology Evolution - Software

		1960s	→ 1970s	→ 1980s	→ 1990s	→ 2000s	→
<u>Language</u>	Ownership	Proprietary				Open Source	
	Code	Machine (Binary)	Assembler	Compiled 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> (Basic)	Object-Oriented (C, VB)		
	Platform	Machine Specific			Intra-operative (Java)		
<u>Data Base</u>	Ownership Structure	Non-Relational Proprietary (ISAM/VSAM)		Relational Non-Proprietary ASCII			
<u>Archi- tecture</u>		Mainframe	Mini	Client Server 2 Tier 3 Tier		Web nTier	
<u>Con- tent</u>		Text		Graphics Voice			
<u>Input</u>		Character Punch Card Mag Tape		Graphic Floppy CD			

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