Musings of a Serial Entrepreneur—Reconciling Theory with Practice

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To reminisce about my entrepreneurial career with appropriate self-importance, I might note that I have helped create companies and jobs. This contributes in a small way to economic growth. Economic growth is, however, an often illusive concept to characterize. Job growth is an essential component of a dynamic, innovative process. In the late 1970s jobs growth research suggested that the vast majority of new jobs are created by small business formation. Such empirical research is difficult to support with theoretical constructs. Classic macroeconomics analysis discounts size-of-firm as irrelevant. Entrepreneurial contribution is therefore difficult to assess.

If we cannot divine satisfaction from arcane macroeconomic treatises (e.g., the "creative destruction theory" of shifting market structure crafted in the 1930s by Joseph Schumpeter), perhaps we can understand, from a bottom-up perspective, how these storied champions of small business formation really think and operate: the entrepreneurs.

If the so-called "science" of economics seems difficult to nail down, so too are the fundamentals and psychology of the venturing process. The intrinsic entrepreneurial success it occasionally spawns, from this practitioner's vantage point, represents a true mélange of conflicting views, often mysterious in its very nature. Accordingly, I choose to study this curious entrepreneurship process as a set of *mysteries!*

The Seven Mysteries of Venturing

Let me address the following seven entrepreneurial mysteries:

1. Are entrepreneurs made or born?
2. Does new venturing represent high risk or "measured" risk?
3. Is the business plan a selling document or an integrated and detailed guide?
4. Should entrepreneurs be fast-moving and act with intuition or employ MBA-like analytical tools?
5. Should emerging companies stay clear of large entrenched companies or try to work with them?
6. Should entrepreneurs focus on personal equity control of their company or relinquish control in exchange for adequate resources?
7. Is the ultimate raise-up of seed and growth capital a logical fall-out of the entrepreneurship process or a serendipitous miracle?

I will apply the lessons of my own successes and failures of the last three decades to interpret these dilemmas.

Mystery #1—Born Entrepreneurs

Are entrepreneurs made or born?

Entrepreneurship can involve mind-numbing risk taking and produce brain chemical rushes that defy description. The very nature of analyzing entrepreneurs can be like trying to interpret the lifestyles of fuzzy, crawly alien life. An integrating principle is often lacking. The "venturing addiction" can also produce anecdotal tales of entrepreneurs snatching defeat from the jaws of victory:

- I had an enraged entrepreneur throw an ash-filled trash can at me (he missed) in London when he stubbornly refused to share, with other venture team members, a meeting with institutional investors. I persisted. The "team" prevailed. We executed a successful London IPO.
- I was sued by an entrepreneur advisee who was emotionally dismayed that I would not endorse the use of either his wife's name or image on a box of biodegradable diapers.
- I was chastised by a "born again" Christian entrepreneur who challenged my very morality for not endorsing a ("born-again" logo) venture for which he intellectually or psychologically could not even craft a sensible business plan . The lack of this critical document caused all his "born again" investors to walk.

Born or made? My own venturing proclivity is best described as an acquired quirk, not a genetic or glamorous gift. I have met just a few life-long, inveterate entrepreneurs. Almost idiot savants, they have been gifted lateral thinkers in strategic thinking, market interpretation, product development, financial "engineering," and the like, while often lacking practical social skills such as tact, flexibility, open communications, team building, and operations savvy. But they're certainly not idiots. I took the more traditional route, acquiring academic and business credentials to establish both an economic safe haven and a knowledge base so I could eventually figure out what I

wanted to be when I grew up. My entrepreneurial learning process is unending, and my own "idiot" issue remains unresolved.

Given that we're trying to reconcile certain theories about entrepreneurship with the practical aspects of competing in the deal-making trenches, the notion of who is attracted to small growth businesses—with what motivation, and what characteristics, and what external environmental influences—is an excellent trigger point to understanding what skill sets become manifest in the entrepreneurial world.

Perhaps a little historic context of regional venture activity would help. The New England region has long been a hot bed for entrepreneurs. As Sobel (1974) notes, the region can boast the early 19th-century factory systems guru Francis Cabot Lowell. His namesake city on the Merrimac River once had 11 robust textile mills, using the Jacquard loom invented in 1801. The use of punched cards to control the new technology set the stage for later application to the computer industry. Ultimately over the span of two centuries, all the textile mills were recycled to commercial high tech. Our region has transformed from dependence on textiles to aerospace/defense, to minicomputers, to biotech, to artificial intelligence, to genomics. Pumped with ideas from MIT, Harvard and a hundred other colleges and universities, our regional economy thrives on brainpower (and precious few state-sponsored economic incentives!).

Entrepreneurs provide the requisite lubricant. Royal Little ignored his uncle (Arthur D. Little), dropped out of Harvard with his own entrepreneurial notion on textile company roll-ups, and learned entrepreneurial finance (find high margin companies with tax losses and modest debt and low stock price; leverage the balance sheet to borrow the bulk of purchase price; sell off nonperforming assets; and repay loan). Textron, one of the region's biggest employers, was thus born of a guiding consolidation principle and entrepreneurial devotion to execution of plan.

By the late 1960s, entrepreneurship in New England was vibrant, but relatively much simpler than today. General Georges Doriot was the reigning VC guru. A Harvard Business School professor, he put his American Research & Development (AR&D) firm in the VC Hall of Fame for parlaying a $70,000 investment in Digital Equipment into almost $500 million in less than a decade. (Of course, the B-School case study revealed in the appendix that AR&D had a negative 9 percent return on the remainder of its portfolio.) The net PR effect to young, aspiring entrepreneurs like myself was addictively alluring. Building exciting new companies that create important customer-satisfying product offerings was a possible career choice. I caught the venture bug, big time, and wanted someday to be an entrepreneur.

The high profile academic who then (and now is chairman of the MIT Entrepreneurship Center) analyzed venture dynamics was Ed Roberts at MIT's Sloan School. He penned a classic *Harvard Business Review* article (Roberts, circa 1965) on venture spin-offs, showing how hi-tech firms like Raytheon, Avco, Itek, and others created hundreds of start-ups along Route 128. He ventured across the Charles River to visit our HBS class (the Management of New Enterprises—MNE) and interacted with us snotty B-schoolers. Perhaps given that his own father was an owner of a retail oil business in Chelsea, Massachusetts, a major premise of Roberts' research was an "environmental" profile of successful entrepreneurs, wherein he portrayed the probability of success to correlate with one coming from a "small business owner" family. Since my auto mechanic dad was only an employee, I appeared to be entrepreneurially-challenged coming out of the box. Professor Roberts took my rantings well, noting that my persistence (read "obnoxiousness") and analytical comments, peppered with objections to his research structure, significant sample size, and loose correlation fits more than offset my presumed environmental shortcomings for small business. I wrote my second-year HBS paper on entrepreneurial pursuits in oceanography. (I have yet to dip my big toe into that marketplace!)

Counterbalancing the traditional business research approach to entrepreneurship has been the provocative theories of the *psychoanalytical thinkers.* Abraham Zaleznik (circa 1965) and Harry Levinson (1970) attempted to analyze the internal wiring of managers and entrepreneurs. Zaleznik is a neo-Freudian who smokes big Churchills and has a symbolic leather couch in his office. As students, we watched psycho-drama movies in his class (e.g., *The Caine Mutiny* and *Twelve Angry Men*). We read Freud and learned about the meaning of Dora's dreams. Zaleznik focused on how individuals mobilize and use power derived from position, competence, and personality. Assumed harmony between position and competence he viewed as naïve, because entrepreneurial position controls the flow of rewards. Disharmonies between an entrepreneur's designated authority and his actual competence can engender psychological conflicts with his venture team.

Levinson points to venturing decision-making evolving out of issues of fear and concern for obsolescence. He analyses the impulsive motives, manipulation, and control and disillusionment of the CEO (entrepreneur).

Manfred Kets de Vries (1985), an HBS classmate, joined

the psychoanalytic camp in the 1970s. He views typical good entrepreneurs as

- achievement-oriented;
- taking responsibility for decisions;
- disliking repetitive routine work;
- having high levels of energy, perseverance, and imagination;
- willing to take calculated risks; and
- gifted in instilling contagious enthusiasm.

He also addresses the "dark side" of entrepreneurship. The distinctive attributes of entrepreneurs seem to produce derived negatives in terms of less glamorous personality quirks:

- generating action for action's sake; thoughtless decision-making;
- difficulty taking direction or advice from board of directors;
- personality idiosyncrasies—"misfit" behavior;
- need for total control;
- suspicious, almost paranoid, tendencies—perhaps derived from inner voices of inferiority;
- need for applause;
- hyperactivity; and
- feelings of suffocation.

Where do I come down on the "good" entrepreneur? Table 1 lists my desired attributes for myself, for my partner(s), or for my mentee (s). I undoubtedly overanalyze entrepreneurs, but I can only pursue two to three deals a year.

A word of caution. Don't overly glamorize the entrepreneur. We did it with the American cowboy. Mostly, the American cowboy was an illiterate, dusty grunt. The entrepreneur is generally quite literate and often cleaner.

Table 1
The Good Entrepreneur

1. Drive and energy
2. Long-term commitment
3. Self-confident
4. Experienced and successful
5. Hungry
6. Persistent problem solver
7. Plans and sets goals
8. Intelligent risk taker
9. Learns from mistakes
10. Accepts criticism
11. Is Creative, takes initiative, makes things happen
12. Good at using available resources
13. Desires to win
14. Integrity
15. Superman (woman)

Just as the recognition, applause, and euphoria of receiving a fancy parchment diploma from a prestigious university only shrouds the years of tedious, occasionally hopeless, toil preceding the glamour of the academic milestone, so too is the notoriety attached to a successful entrepreneurial effort. It's real hard work. Only less difficult than such impossible challenges as finding a cure for the common cold, giving birth to a baby, or being a member of Red Sox Nation. It's 2 percent inspiration and 98 percent perspiration. The former is extolled. The latter soon evaporates from memory.

The successful entrepreneur can and should be viewed favorably. MIT's Edward Schou noted, "Champions of new invention display persistence and courage of heroic quality."

Mystery #2—Venturing Risk

Does new venturing represent high risk or "measured risk?"

Like many of the best entrepreneurs I have known, I firmly adhere to the adage "It is far better to be lucky than smart, any time, every time!" We certainly acknowledge the rigors of the Darwinian, survival-of-the-fittest law of the jungle. But if you bump into a free lunch, enjoy the free lunch! As a 23-year-old, fresh out of B-School, I was assigned to take an analytical look at a modular housing venture. Fortuitously, *Business Week* had that very week published a 46-page cover story on the housing industry that allowed me to quickly assemble a 60-page presentation and champion the opportunity, ultimately letting me secure corporate backing in just seven weeks. How good is that kind of good luck?

Why look for good luck? Because being an entrepreneur in a dynamic, competitive market environment is so difficult. So many variables are in play. Some (independent) variables, you may be able to control. Most (dependent) variables, you hope you can influence your way. Like USAF test pilots or barnstorming daredevils, entrepreneurs want to measure, control, and minimize risk while getting the job done—successful small business growth.

Churchill and Lewis (1983) provide a framework for the five stages of small business growth:

1. Existence
2. Survival
3. Success
4. Take-off
5. Resource maturity

Uncertainty is highest in the early stages. If lucky and if the entrepreneur manages risk well, risk should diminish across stages. But the nature of the numbers problem persists:

- 1 of 19 new products will succeed.
- Less than 10 percent of all new industrial products will return a profit.

- As much as 50 percent of present revenues in most major industrial companies are accounted for by products not in existence five years ago.

The first 98 percent of product development is relatively easy. The last 2 percent is very hard. So imagine how risky the marketplace is for a raw start-up with no long-term customer base and no infrastructure! Short-term venture sales are, therefore, critical. Revenues cover a variety of venture sins. Cash flow is helped. Validation of the venture begins.

And the entrepreneur may have no resources! Arthur Rock (1987), an experienced venture capitalist, reports his experience. Rock looks at more than 300 business plan proposals a year. At the end of the year, he has invested in only one or two companies. Entrepreneurs can spend more than half their time during stage one (existence) looking for seed capital. And the odds are that they will come up dry.

What due diligence is required to vet the entrepreneur? What questions do I ask myself, my partners, my advisers? Table 2 lists my typical sequence.

If—that's a big "IF"—suitable answers are provided, risk can be assessed and managed. And IF I don't lie to myself (the far too prevalent "self-deception"), and IF my partners or venture incubators don't lie to me. Due diligence really means finding the right answer to these questions.

Table 2
Ten Questions to Ask a Small Business

1. Is the company in an area of emerging technology?
2. Is there a market for the technology or product?
3. Why didn't an established company decide to exploit and market the product?
4. Is there a natural product line or follow-on technology?
5. Does management have corporate experience?
6. What are management's goals?
7. Does management have a 10-year objective and 5-year plan?
8. Does management understand:
   - Research & Development?
   - Product Development?
   - Manufacturing?
   - Finance?
   - Accounting?
   - Legal?
   - Marketing & Sales?
   - Other?
9. Does management understand the nature and use of money?
10. Does management have a competent, recognized leader and decisionmaker?

Table 3
The Business Plan

1. Executive Summary
2. Description of Business & Industry
3. Features & Advantages of Products or Services
   - Descriptions, Proprietary Position, Potential
4. Market Analysis
   - Customers - Market Size and Trends
   - Competition
   - Estimated Market Share and Sales
5. Marketing Plan
   - Marketing plan - Pricing
   - Sales Tactics - Service and Warranty Policies
   - Advertising, Public Relations, and Promotion
6. Product Development Plan
   - Development Status and Tasks
   - Difficulties and Risk - Costs
7. Operations Plan
   - Geographic Location - Facilities & Improvements
   - Strategy and Plans - Labor Force
8. Management Team
   - Organization - Key Management Personnel
   - Management Compensation & Ownership
   - Board of Directors
   - Management Assistance and Training Needs
   - Supporting Professional Services
   - Public Accounting Firm - Legal Counsel
9. Overall Schedule
   - Incorporate Venture
   - Completion of Product Development
   - Sales Representation
   - Dates of Displays at Trade Shows
   - Build-up of Inventory - Start of Operation
   - Receipt of First Orders - First Sales and Deliveries
   - Payment of First AIR (Cash "in")

   Also:
   - Number of Management Personnel
   - Number of Operations Personnel
   - Additions to Plant or Equipment
10. Critical Risks and Problems
    - Price Cutting - Bad Inventory Trends
    - Overruns in Product Development
    - Overruns in Operating Costs
    - Low Orders - Schedule Delays
    - Long Lead Times in Procurement
    - Credit Line - New Equity
    - Lack of Availability of Trained Labor
11. The Financial Plan
    - Income Statement - Balance Sheet
    - Cash Flow - Key Ratios - Assumptions
12. Proposed Company Offering
    - Desired Financing - Capitalization - Use of Funds

Truth be told, no new venture at outset has a probability of success much above 3 to 5 percent. Why? If you take the inherent uncertainty of each of the 6 to 10 functional areas (e.g., finance, R&D, product development, sales, production, distribution, etc.), and lay out the sequence of a simple decision tree, you generate hundreds of milestones (events and decision points) that must be resolved in stages to reduce the band of uncertainty. Intelligent execution of the daily plan is critical. Two friends/colleagues—Baty (1974, 1990) and Brown (1980)—address execution. God is in the details. Incremental progress against agreed-upon milestones reduces risk. A successful journey through the venture minefield results in the eventual reduction of risk.

The entrepreneur, however intuitive, must remember to show constant vigilance regarding those pesky land mines. Managing that risk is something I highly endorse. Perhaps the entrepreneur should consider the *Serenity Prayer*: God grant me the *serenity* to accept the things I cannot change, the *courage* to change the things I can, and the *wisdom* to know the difference.

Mystery #3– Role of the Business plan

Is the Business plan a selling document or an integrated and detailed guide?

Many of us, or our kids, invest considerable time and energy playing fantasy baseball or fantasy football. It's fun but not real. So, too, goes the game of fantasy business plan. The only certainty with a really comprehensive business plan is that what really eventuates will be substantially different from the scenarios presented in the plan's glossy pages. As the wag noted, "Forecasting is always difficult, particularly when it's about the future!"

The business plan is an integrated document that embodies narrative and numbers. Long-winded, incoherent, poorly-written plans are common. Clear, well-written, and *concise* plans that insightfully crystallize the crux of the business concept are quite rare. My personal business plan outline is listed in Table 3. One customizes the content appropriate to the company's business.

Business plans must be

- concise,
- complete,
- consistent,
- powerful,
- easy-to-understand, and
- obvious as to how the application of funds reduce venture risk.

My personal prejudice toward business plans is built upon 35 years of being in their midst. Familiarity breeds contempt. I would estimate that I've personally written 650 to 700 plans and reviewed, in depth, 2,200 to 2,500. I have seen all kinds of attempts to communicate (or obfuscate in the case of a bunch of dot.coms). As with most entrepreneur-investors, I've really been there; don't try to BS a BS-er!

Theory v. Practice. White and Graham (1978) provide a model for spotting technological winners. They identify 4 "merits":

1. Inventiveness
2. Embodiment (e.g., miniaturization)
3. Operational
4. Market

These merit assessments lead to a sense of *technological potency* and *business advantage*, which may then translate into *innovative success.* I have found this theory helpful as a checklist to dissecting the plan. My ultimate test is taking that great Internet-induced buzzword—"business model"—and applying common sense:

- Perform extensive sensitivity analysis on the spreadsheet projections;
- Test the assumptions for consistency, accuracy, and completeness;
- Ask the really important questions:
  - Who is the customer and what does he or she want?
  - What value is provided?
  - What is the competition?
  - How does the company actually make money?

Business Models; Case Examples. Magretta (2002) cites two examples of business models. In 1892, American Express introduced the travelers' check. The advantage? Customers paid for the checks up front. It worked on float! Great concept. Sound premise. In contrast, Disney opened European amusement parks with a glaring error in one assumption on restaurant utilization. Americans eat in park restaurants all day long. Europeans have precise, set eating schedules. Disney lost millions before fine-tuning an acceptable solution. Understand what makes the business model really work.

Opportunity for Change in Direction. I use the business plan more as a validation and communication device, than as a management control tool. The plan can help change strategic direction. On two major deals, I actually convinced the venture team to change the end market:

1. *Color-matching case example.* Instead of the dental market (enamel color matching) where dentists are hard to access and nearly impossible to sell, we switched over to the retail paint market where 40,000 retail paint dealers could be accessed through 40 paint manufacturers.

2. *DC to AC Electric conversion case example.* Instead of attacking the residential solar electric market and competing with large utilities, we convinced the team to become an uninterruptible power source (UPS) supplier for the then-emerging personal computer market. Having the right business concept resulted in *billions* of dollars of created market value.

Depth of Analysis. Clopton's law states: "For every credibility gap, there is a gullibility fill." With business plans, you risk sudden death using this premise. Assume all facts will be checked and assumptions questioned by investors. Practical suggestions include looking at

- Customer purchase orders (POs) and letters of intent (LOIs)
- Bill of materials authenticated by vendors
- Banking facilities showing working capital availability
- Useful comparative ratio information from recognized sources:
    - Dun & Bradstreet
    - Standard & Poors Corporation
    - Robert Morris Associates
    - Value Line
    - Various trade associations

On the color-matching "Greenfield" IPO placement on the London Stock Exchange, my spreadsheet was actually *audited* cell-by-cell by a then-Big 7 firm. I did everything but put my first-born male in escrow! Assumptions were cross correlated to the aforementioned documents (POs, LOIs). By doing it "right" and completely, we successfully raised $2.8 million in a precedent-setting deal.

Basis of Due Diligence. The business plan allows potential investors to initiate due diligence. As an entrepreneur, you want this to happen well and efficiently in order to attract the desired investment.

Linde and Prasad (2000) wrote the MIT Entrepreneurship Center study on Angel Investors. While some angels act intuitively, some conduct detailed due diligence. They

- Read through the business plan.
- Speak extensively with the entrepreneur and the management team.
- Check the references and background of the team.
- Phone current and prospective customers.
- Discuss and introduce the company to prospective customers and strategic partners to gain a better understanding of market interest.
- Ask technology experts to evaluate the technology.
- Discuss the deal with targeted industry business associates.
- Understand product-specific market issues by talking with industry consultants and investment bankers.
- Ask other angel investors or venture capitalists familiar with the industry to look at the deal.

A good business plan sets you on the right track.

Mystery #4—Intuition v. Analysis

Should entrepreneurs be fast-moving and act with intuition or employ MBA-like analytical tools?

In a sense, this mystery in some circumstances is almost a nonissue. With truly experienced, competent entrepreneurs, their extensive knowledge base, intellect, and personal insight from past successes and failures imbue them with an analytical sixth sense that seems hard-wired into their DNA.

Perceptions of Analysis. Sixth-sense intuition may seem nonanalytical to some casual observers. Many investors, in fact, are critical of stubborn entrepreneurs who might deem requests for supporting management analysis (reports, forecasts, budgets, schedules, ratio analysis) to be interfering and a "useless crutch." Their board of directors and investors (many with MBAs) may well view such requested analytical oversight as "management religion" that needs appropriate devotion.

I have mediated this debate for years. The flip side extreme, of course, was our MIT ScD CEO who, having sold just his first three black boxes (UPS), wrote his own customized inventory control system that could have helped to run all of General Motors! It was overkill! We substituted a $30 software package.

Three important points to the analytically-reluctant entrepreneur

1. The board of directors and investors are really your "customers." If they want an analytical measure of XYZ, they probably should get it. This marketing approach eliminates a potential negative.
2. Creative use of analytical tools can create valuable respect and trust. For example, Admiral Hyman Rickover, father of the U.S. Nuclear Submarine program, gained unprecedented independence from his DoD bosses by adopting Program Evaluation and Reporting Technique (PERT) controls for the management of the program. This preemptive approach creates a positive.
3. An ability to apply concepts like game theory (win-win, win-lose, lose-lose) helps in all phases of growing a company. Win-win outcomes create a bigger pie from which all players can share.

Need for Better Analysis. Sometimes, beyond issues of perception, the entrepreneur actually *needs* the help of MBA-like tools. Consider two examples:

1. *Defensive:* Investors, bankers, and auditors tend to be analytical. Armed with their assessments, they can kill the entrepreneur's pet project as too risky.

Hodder and Riggs (1985) report that under many circumstances, the traditional risk assessments overstate risk:

- Improper treatment of inflation effects
- Excessive downward ROI (DCF) adjustments for risk, even when risk actually decreases in later stages of the project
- Failure to acknowledge how management can proactively influence the reduction of risk

2. *Offensive:* In one of our young public companies, we closed on an $11.5 million secondary offering only because we could schedule an M&A transaction in 75 days rather than the expected 120 days. The secret? We used PERT to fast-track the closing of the transaction. Without this analytical tool, there would be no deal. The market capitalization increased 150 percent!

Table 4
Warning Signals

- Financials and ratios ignored: Margin, market, debt, capital, people
- Excuses: Lame and repetitive
- Inadequate control and information systems
- Projects delayed, over cost, behind on milestones
- Morale suddenly low

Consequences. Despite good intentions, ventures can turn sour. Table 4 lists warning signs that repeat themselves all too often. Table 5 lists internal problems. Entrepreneurs, self-styled as invincible, often ignore these warnings. Compliant BODs become unwitting enablers. Disaster looms.

Hamm (2002) addresses the classic shortcoming of entrepreneurs' ability to scale up operations. Entrepreneurs who can scale must take deliberate steps to confront their shortcomings and become the leaders their organizations need them to be. What barriers do many entrepreneurs subconsciously introduce to thwart their own efforts? Consider these negatives:

- Undue loyalty to comrades.
- Task orientation rather than goal-orientation.
- Single-mindedness and insensitivity to others.
- Diffidently working in isolation.

The consequences to the entrepreneur of not adapting to the needs of his or her growing company can be dire. Consider

- I have led the firing of five CEOs of public companies we have founded or cofounded.
- I have been fired three times.
- I have fired myself twice.

Table 5
Internal Problems

- Management factor
  - Inadequate depth
  - Limited experience
  - One-person rule
  - Inbred bureaucracy
- Weak finance function
  - Lack of operating controls
- Nonparticipative board

Not all relationships last forever, even with the companies we start up ourselves. MBA tools can and should help the venture relationship to be more robust and last longer. But not always. Certainly not when other, stronger egos are in conflict. In the end, the analytical approach to entrepreneurship can help the evolving small business immeasurably, as long as it isn't preempted by the darker psychological underbelly of the entrepreneur.

Mystery #5—Dancing with the Big Guys

Should emerging companies stay clear of large entrenched companies or try to work with them?

Tales of Odd Couples. Even the most optimistic dealmaker acknowledges that the notion of a small venture approaching a megacompany for a discussion or potential strategic alliance is truly incongruous. The two entrepreneurs might typically sit in the oversized conference room that comfortably seats 250, waiting for a battalion of 25 to 30 MBAs, PhDs, CPAs, and BMOCs to troop in. Their corporate staff of 2,700 oversees their 310,000 employees. "What do you guys want to do?" they ask. They view this interruption as an "aggravation meeting" that must be dealt with politely, but quickly. In contrast, the entrepreneurs aggressively approach the "big opportunity" like a flea climbing the elephant's leg with intent to rape. The circus act begins.

Occasionally, an alliance agreement with a Big Guy is actually secured. For example:

- Our waste tire recycling company allied with a $1 billion liquid nitrogen vendor (vendor and equity agreements). Also, the company allied with a $3 billion waste management company (which led to the $6 million acquisition of their tire-related assets).
- Our medical laser company allied with Massachusetts General Hospital and funded (and received licensing rights to) contract research for world-class medical technology.
- London investors actually loved that our color-matching company had a seven-year office lease with a large international can company; they liked the long-term

security (and the presumed third-party endorsement from a well-known company). We, of course, disliked the lease's long-term financial commitment.

- Our online investment bank/brokerage operation allied with a $500 billion European bank. The snail-like Europeans picked our brains for a year, then invested more than $60 million in equity. They promised to deliver one million "accredited investor" accounts to our electronic platform over 12 months. Their bureaucratic in-fighting over project control delayed all milestone achievements and resulted in their ultimate acquisition of our assets. The Big Bank killed us with slow love.

Guiding Principles for Strategic Alliances. What does practice suggest about theory in this partnering mystery? Kuhn (1988) discusses negotiating skills and secrets that can be applied to the strategic alliance deal-making process. Relevant tests include

- *Consistency Test:* Do major variables hang together (goals, cash flow, milestones)?
- *Importance Test:* Relevance, benefits?
- *Structure Test:* Are we biting the right bait?
- *Smell Test:* Is negotiation obstinate, disruptive, honest?

Many negotiating games are played: Big firms train their representatives to low ball, high ball, bluff, bait-'n'-switch, sandbag, sting (lie, drop out), and refer to "unknown, uncontrollable authorities." Perhaps during these stressful, direction-turning times, we need to recall the psychoanalytical teachings of Zaleznik (circa 1965), Levinson (1970) and Kets de Vries (1985). I'd be crazy not to.

Tables 6 and 7 summarize my views on important conditions to ensure success and well-structured alliances. The a priori conditions for success *must* be built into the deal structure.

Strategic alliances can represent wonderful access to markets, technology, and resources. Investors absolutely adore the implied third-party endorsement of "an important player." If one can get through the mating dance, due diligence (ideally, give them your IPO registration material!), and big company smugness (throw your MBA back at them!), then all that is left is the 98 percent effort to execute the alliance. The land mines start appearing.

Table 6
Joint Ventures:
Important Conditions to Ensure Success

1. Style of operations
2. Time perspectives
3. Financial goals
4. Collaborative decision-making
5. Balanced strengths
6. Past work relationship
7. No takeover threats
8. Top echelon visibility and access

Table 7
Well-structured Alliances

1. Strategic synergy
2. Positioning opportunity
3. Limited resource availability
4. Less risk
5. Cooperative spirit
6. Clarity of purpose
7. WIN-WIN
8. Positive third-party endorsement for investors

What can go wrong dealing with the Big Guys? "I thought my partner was responsible for that?" is a typical lament of a failing strategic alliance!

Mystery #6—Control v. Funding

Should entrepreneurs focus on personal equity control of their company or relinquish control in exchange for adequate resources?

This is the easiest mystery to figure out. Cash is king. Initially, most entrepreneurs answer incorrectly.

Reality Check for Control.

- In practice, entrepreneurs psychologically view the venture as a "child." Often they're ignoring their own family life, so the notion of being loyal to the venture offspring has supreme import. Giving away control of the child is often deemed to be total anathema to them. The reaction is remarkably visceral.
- In theory, the entrepreneur needs adequate funds to fuel company growth. Accepting funding dilutes the entrepreneur's percentage ownership. The more funds raised at initially low company valuation, the more severe the dilution impact.
- The balancing act is a tradeoff. One "optimizes" the coupling of resources with venture need; it is *not* a "maximization" effort. Too much capital raise-up too early causes unnecessary dilution at low valuations.
- The bottom line: Careful financial planning can be effective. Many venture team members with 1 to 5 percent ownership stakes at IPO time can become financially well-off. A sliver of a big juicy pie can be a lot. Conversely, 100 percent of very little is very little.

Complexities of Equity Ownership. An analysis of the resource-equity control mystery is a nontrivial exercise in the trade-off of many variables. Several key variables influence the assessment:

- Cash needs/timing
  - Sales growth and working capital requirements
  - Profit margins
  - Investment requirements
  - Working capital line of credit availability
- Perceived valuation by sophisticated investors (pre- v. post- money) at important milestones
- Source of funds; different investors have selective ROI criteria
- Impact (fully dilutive) of employee stock options (at particular exercise prices).

Ronstadt (1988) devotes an entire text to entrepreneurial finance, wherein he articulates the end game as being neither *under-* nor *over*capitalized in fund-raising at any point in time. The trick is to find a threshold band of capitalization at critical points in the venture's growth cycle to determine funding requirements. He emphasizes, rationally, comprehensive, exhaustive interaction of spreadsheet values, conditioned by severe questioning of key assumptions, and heeding key industry ratio values. He advocates worst, likely, and best case scenario analysis.

Hoffman and Blaky (1987) explain how to negotiate terms with investors:

- Understand weighted v. full-ratcheted antidilution provisions.
- Offset equity forfeiture for poor performance with bonus options for good performance.
- Define employment control—severance values.
- Address shareholder control—voting-rights issues.
- Assure an ability to cash-out personally.

Simplifying Model of Dilution and Ownership. Years of heated discussions with emotional entrepreneurs have forced me to devise a simple, generic, integrated model to accommodate the iterative aspects of this otherwise overly-complicated equity-bleed process.

Table 8 shows, with illustrative values, how the CEO-entrepreneur can be diluted down to 27 percent ownership and still make him or her worth (on paper until he or she cashes out) more than $16 million. Hand-holding for the entrepreneur, the venture team, and the investors is still required. This interactive model helps with all these stakeholders.

Mystery #7—Funding: Logic or Miracle?

Is the ultimate raise-up of seed and growth capital a logical fallout of the entrepreneurship process, or a serendipitous miracle?

Views on Money.

"Go where the money is."

—Willie Sutton (Brink's Bank robber)

"Money is the resource to gain market share."

—Japanese saying

"Money is *not* the goal; just the best measure of success."

—Entrepreneurial saying

"Money *is* the goal; just ask the stockholders!"

—Investor saying

Financing Process. Siegel (1990) presents a synopsis (see Table 9) that summarizes the financing process.

Timmons and Sander (1986) remind us of everything the entrepreneur *doesn't* want to know about raising capital; the process can take up to half the founder's time over the first six to nine months. He may have to guarantee loans personally. The entrepreneur can get fired. His stock can be appropriated. Control of the BOD can be wrested from him. He can lose his "child!"

Resolution to Capital Raise-up.

- Persistence in selling the venture to investors is key. The entrepreneur must work the capital raise-up 18 hours a day. Case example: Use reverse psychology. In the tire recycling venture, most of the seed and bridge capital came from people whom I initially insisted couldn't be in the deal. The more I resisted, the more they wanted *"in."* At IPO time, we submitted in sequence seven different registration statements to the SEC, with *four* different underwriters. Desperate, driven people simply don't give up. They push until there is no more "push" left! We wore everyone out. The professional support people (lawyers, auditors, etc.) needed the deal to close so they could get paid!
- Demonstrate the magic of the cap chart (Table 8) to investors. They are looking for a 4-bagger or an 8-bagger on their money. The brilliance is to show these investors how they get their "vig" while keeping the deal terms favorable to the venture.
- The harder you work, the luckier you get. Excruciating detail to investor follow-up, investor group meetings with management, weekly updates, daily calls—all create investor interest.
- In truth, this money-raising *mystery* is still pretty much a mystery to me. Work the logical financing process and gleefully accept good luck when it presents itself. The Law of Large Numbers generally is at work. The more financial raise-up action that is in play, the higher the probability of success. The higher the probability that you will get lucky!

Conclusions to a Magical Mystery Tour

- Entrepreneurship is not for most (read: 99.9%) people.
  - Erratic income; minimum fringe benefits
  - Highly cycling net worth
  - Excessive work tension, pressure, impact on family life
  - Long gaps before enjoying positive feedback
  - 2 percent inspiration, 98 percent perspiration

- Benefits are worth it to the truly addicted.
- For me, measures of success have outweighed the costs:
  - personal financial gain
  - helped create more than 5,000 jobs
  - helped to create about 7 dozen millionaires—2 dozen (first time); 5 dozen (already there)
  - helped create several dozen companies with products serving thousands of satisfied customers
- Issues of entrepreneurial theory v. practice; intuition v. analysis; risk v. reward; individual drive v. team building efforts—all *can* be *reconciled*. But only if you work so very hard enough to get *lucky*.

Table 8
Simple Equity Model

[Co. Valuations in $000's]

Scenario / Stage		Initial	Angel #1	Employee Options Plan #1	VC or Pvt. Placement # 1	Employee Options Plan #2	IPO @ $ Valuation
Without Stock Options Dilution							
Pre-Money Value		$3,500	$6,500	$8,000	$12,000	$15,500	$45,000
Additional Investment		n/a	$1,500	n/a	$3,500	n/a	$15,000
Pre-Money Stock Price		$3.50	$6.50	$6.50	$9.75	$9.75	$28.31
New Investment Stock Price		n/a	$6.50	n/a	$9.75	n/a	$28.31
Post-Money Blended Stock Price		$3.50	$6.50	$6.50	$9.75	$9.75	$28.31
Pre-Money No. of Shares [I/O]		1,000,000	1,000,000	1,230,769	1,230,769	1,589,744	1,589,744
Additional No. of Shares [I/O]		0	230,769	0	358,974	0	529,915
Post-Money No. of Shares [I/O]		1,000,000	1,230,769	1,230,769	1,589,744	1,589,744	2,119,658
Post-Money Value		$3,500	$8,000	$8,000	$15,500	$15,500	$60,000
Accounting for Stock Options Dilution							
Issue of Employee Stock Options [as % of I/O]				10%		10%	
No. of Stock Options Issued				123,077		158,974	
Exercise Price [@ 80% of Pre-money Stock price]				$5.20		$7.80	
Fully Diluted No. of Shares			1,230,769	1,353,846	1,712,821	1,871,795	2,401,709
Fully Diluted Post-Money Value			$8,000	$8,640	$16,140	$17,380	$61,880
Fully Diluted Blended Stock Price			$6.50	$6.38	$9.42	$9.29	$25.76
Fully Diluted Holdings: %'s, Nos. of Shares, & Values							
CEO	F. D. %	65.0%	52.8%	48.0%	37.9%	34.7%	27.1%
	F. D. # Holding	650,000	650,000	650,000	650,000	650,000	650,000
	F. D. $ Holding	$2,275	$4,225	$4,148	$6,125	$6,035	$16,747
SVP	F. D. %	35.0%	28.4%	25.9%	20.4%	18.7%	14.6%
	F. D. # Holding	350,000	350,000	350,000	350,000	350,000	350,000
	F. D. $ Holding	$1,225	$2,275	$2,234	$3,298	$3,250	$9,018
Angel #1	F. D. %	0.0%	18.8%	17.0%	13.5%	12.3%	9.6%
	F. D. # Holding	0	230,769	230,769	230,769	230,769	230,769
	F. D. $ Holding	$0	$1,500	$1,473	$2,175	$2,143	$5,946
VC / PP #1	F. D. %	0.0%	0.0%	0.0%	21.0%	19.2%	14.9%
	F. D. # Holding	0	0	0	358,974	358,974	358,974
	F. D. $ Holding	$0	$0	$0	$3,383	$3,333	$9,249
Total Employees	F. D. %	0.0%	0.0%	9.1%	7.2%	15.1%	11.7%
	F. D. # Holding	0	0	123,077	123,077	282,051	282,051
	F. D. $ Holding	$0	$0	$785	$1,160	$2,619	$7,267
Public Investors	F. D. %	0.0%	0.0%	0.0%	0.0%	0.0%	22.1%
	F. D. # Holding	0	0	0	0	0	529,915
	F. D. $ Holding	$0	$0	$0	$0	$0	$13,653
All Investors & Employees	F. D. %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	F. D. # Holding	1,000,000	1,230,769	1,353,846	1,712,821	1,871,795	2,401,709
	F. D. $ Holding	$3,500	$8,000	$8,640	$16,140	$17,380	$61,880

Note: **Inputs are highlighted, like this.**

Table 9
Financing Process

A. Preparing for a Financing Transaction
1. Identify your goals and financing requirements
2. Business plan
3. Management team
4. Professional advisors

B. Sources of Financing
1. Start with sources of capital known to the company
2. Seed capital
3. Venture capital
4. Institutional investors
5. Government sponsored/subsidized financing
6. Strategic or corporate partners

C. Risk V. Reward
1. Debt
2. Equity
3. Pledge of corporate assets/stock
4. Personal guaranties
5. Technology rights
6. Management and control

D. Financing Process
1. Timetable
2. Due diligence
3. Clean-up of corporate records and insider transactions
4. Disclosure/offering documents
5. Director and stockholder approval

E. Securities Laws
1. Federal laws
   - Registration of securities
   - Exemptions from registration
   - "Safe harbors" - Regulation D
   - Accredited investors
2. State ("Blue Sky") laws
   - Registration of securities
   - Exemptions from registration
   - Limited offering exemptions
3. Use of sales and advertising literature
4. Brokers, dealers, and finders

F. Equity Financing Terms and Conditions
1. Investment agreements
2. Representation and warranties
3. Restrictions on transfer
4. Preemptive rights
5. Registration rights
6. Antidilution rights
7. Conversion rights
8. Puts, calls, and mandatory redemptions

G. Tax Considerations
1. Subchapter S
2. Section 1244 stock
3. Stock for services - Section 83(b)

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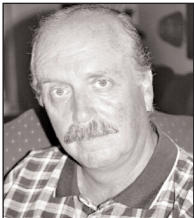

About the Author

Joe Levangie (jelevangie@covad.net) is a Boston-area investor, adviser, and entrepreneur. Over the last quarter century, he has helped launch several dozen new business enterprises—first from a large company platform, then from a not-for-profit incubator, and later as an venture adviser, as an independent entrepreneur, as an active investor, and as a passive "angel." His companies have competed in a wide array of industries: financial services; renewable energy; uninterruptible power sources; biotech; computer hardware, flex circuits, and software; medical lasers; electronic retail color-matching systems; radioactive medical implants; food technology; modular housing; semiconductor equipment; specialty materials; and waste tire recycling. The number of Levangie's ventures successfully completing an IPO has now reached double figures. He has served on the board of directors of dozens of private and public companies and has been a guest reviewer at business plan contests at MIT and Harvard Business School. Levangie is an active alumnus of both institutions. He currently is vice chairman of Ardour Capital, a New York City investment banking firm.