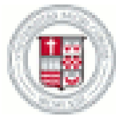
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Spring 2005 Volume 8 Number 1

From the Editors

Laurence Weinstein, Joshua Shuart, Christopher Sheehan, Joseph Levangie

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with Lisa and Rick Agee

Refereed Articles/Case Study

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By Kirk C. Heriot, Mercer University and Noel D. Campbell, North Georgia College & State University

From the "Practitioner's Corner"

Everything You Always Wanted to Know about IPOs*
*** But Were Afraid to Ask**
By Joseph E. Levangie, Vice Chairman, Ardour Capital, L.L.C

College of Business, Sacred Heart University

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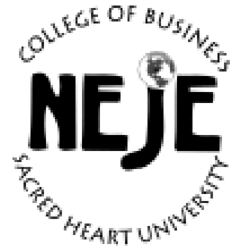

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New England Journal of Entrepreneurship

Call for Articles

New England Journal of Entrepreneurship (NEJE), published twice a year by Sacred Heart University's College of Business, is intended to be an invaluable forum for exchange of scholarly ideas, practices, and policies in the field of entrepreneurship and small business management.

The *Journal* is currently seeking original contributions that have not been published or are under consideration elsewhere. The scope of the articles published in *NEJE* ranges from theoretical/conceptual to empirical research, with maximum relevance to practicing entrepreneurs. The *Journal* tries to appeal to a broad range of audience, so articles submitted should be written in such a manner that those outside of academics would be able to comprehend and appreciate the content of the material.

Format

Effective September 1, 2005, *NEJE* is moving to an electronic submission process. Manuscripts submitted to *NEJE* should be written in Microsoft Word or saved in RTF (rich text format). All papers should be submitted electronically, via email attachment, to shuartj@sacredheart.edu.

Accompanying each manuscript, as a separate file, should be: (a) an abstract of the article (100 words maximum), (b) a biographical sketch of the author(s), and (c) a page with manuscript title and the order of authors as well as the primary author's name, mailing address, preferred phone and fax numbers, and email address.

Authors' names should not appear anywhere in the manuscript.

Papers are to be double-spaced with one-inch margins. References should be included on separate pages at the end of the paper. Manuscripts should be no longer than 20 pages of text and 25 pages total, including abstract, text, tables or illustrations, notes and works cited. Please consult APA style guidelines for all formatting details.

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Review Process

All articles will be double-blind refereed. Authors will normally receive reviewers' comments and the editors' publishing decision in approximately 90 days of submission. Please note that given the upcoming "Special Issue" (to be published Fall 2005), we anticipate that all new submissions will not be considered for publication until the Spring 2006 issue or later.

Due to the change in submission process, the $20 submission fee will no longer be required.

Submission

Authors are encouraged to submit articles for the Spring 2006 issue by December 1, 2005. Papers received after the due date will automatically be considered for future issues of the *Journal.*

All snail-mail correspondence should be addressed to:

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Sample Copies

Sample copies of the previous issues will be available from the Editor on a first-come, first-served basis.

New England Journal of Entrepreneurship

From the Editors

With this issue, we complete seven years of bringing our readers distinctive, thoughtful and reflective articles on issues relating to global entrepreneurship and small business.

And with this issue, we announce Dr. Laurence Weinstein's retirement as editor and co-founder of the Journal. The amount of time needed to start up the *NEJE* (along with Dr. Madan Annavarjula, Northern Illinois University) and to operate such an enterprise has been an enormous drain from his own curriculum development work and scholarly research. It is time to pass the baton.

An interim editor will be named shortly to carry on the work of the Journal along with the rest of the dedicated editorial staff. We anticipate the Special Issue topic, "Measurement Issues in Entrepreneurship," under the editorial leadership of Drs. Jill Kickul and Sylvia Maxfield of the Simmons School of Management and Dr. Norris Krueger of TechConnect, will be published this fall.

That leaves us with a final "pitch" for our regular readers to peruse this spring issue, which includes articles on oral histories as a research tool to study entrepreneurship practices; on hiring HR support; on preparing a small business for evaluation; on setting up a new center for business study in Colombia; and, from the Practitioner's Corner, an article on IPOs.

As always we thank those who submit manuscripts to us for consideration, the reviewers who do an enormous amount of "unsung" work in making suggestions for improvement in those manuscripts, and to you, our readers, for your thoughtful feedback after each issue.

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Goatboy Soaps: From Itch to Concept to Execution

Lisa and Rick Agee, Owners

Lisa and Rick Agee of New Milford, Connecticut, are in their second full year of trying to turn their lifelong dream of being financially independent from corporate life into a reality. They are placing their bets on their product line of goat's milk based soap products (www.Goatboy.us). Goat's milk is said to have important skin benefits for the user over commercially made bar soap products such as Dove, Ivory, Dial, Olay, Zest and Irish Spring.

NEJE: Goats are cute . . . from a distance. But why would anyone want to use a product that promotes the use of goat's milk as its main ingredient?

Lisa: Our second son was born with severe allergies, including one to cow's milk. I was frantic with worry and checked every medical resource I could to figure out how to deal with the problem. After several intensive days of wondering what our options were, I came across the use of goat's milk as a substitute. It worked beautifully.

Rick: It didn't take long for us to nickname our son, "Goatboy," and while he has long outgrown the moniker, we thought of the name immediately for our company when we decided to get into the goat's milk soap business.

NEJE: Do you have a lock on this business? Is it unique to you?

Lisa: Hardly! Go on the Internet and you can find dozens of small cottage industry entrepreneurs all selling their goat's milk soap. The difference between us and many of these operations is that we have a half dozen goats living in our backyard here in rural Connecticut while some of our competitors simply buy powdered goat's milk to mix with their other ingredients. That makes our main ingredient as fresh as you can get!

NEJE: Okay, we understand why your son would want goat's milk because of allergies, but why would adults want your product?

Rick: Do you ever get itchy skin in the winter time? If you do, and I see you nodding your head, then you are one of millions of Americans who use regular commercial soaps when you should be using our soap. If you look into the history of goat milk, you'll find that people have been using goat's milk for a lot of different reasons over thousands of

years. Awareness of goat milk's many benefits have just been late in arriving in the United States.

Both Lisa and I used to itch like crazy during the winter months. Nothing seemed to help our skin until we connected the dots and figured out that if goat's milk could help our son with his childhood allergies, then maybe a goat's milk soap bar could help our skin. We purchased several bars from a woman in upstate New York who we found over the Internet and, I can't say we were surprised, the goat soap made all the difference. Within two months, our skin dryness and rashes were gone and we knew we had found a better product.

Within a year after that, we decided to start making goat's milk soap for ourselves rather than pay someone else to do it for us. We mentioned what we were doing to friends and they started to ask us for our soap. Soon we were getting requests from more and more folks and thought, hey, we've got the makings of a business here.

NEJE: Hold on, Rick, Dove or Ivory are in a lot of bathrooms in this country. Those brands promote strong benefit claims of "softness," "purity" and "mild cleansing." Aren't those claims accurate?

Rick: The soap companies are misleading the public. They may say they have glycerin in their soap bars, but most of the glycerin that is created during the soap production process is actually removed from the soap in the curing stage and used in other products or sold off to bulk buyers. Commercial bar soaps you find in your average supermarket have very little glycerin or other skin-moisturizing

ingredients. When you buy and use goat's milk soap, you are in for a whole new experience. Our soaps are kind to the skin. In fact, folks with psoriasis and other serious skin problems find our goat's milk soap products to be extremely helpful.

NEJE: Pardon our skepticism, but you do really think you can tackle the likes of Procter & Gamble, Unilever and Palmolive? Be real!

Lisa: No, we don't suffer from delusions of grandeur, if that is what you're implying. But the key to our success is to find a niche need and fill that need to the best of our ability. As word of Goatboy Soap spreads, we will hopefully be able to generate enough revenue to live quite comfortably and never have to go back to our corporate jobs. At least, that's our goal.

NEJE: Folks reading this interview will wonder what is so terribly awful about corporate life that you felt you had to leave it.

Rick: I spent more time in corporations than Lisa did, so I'll answer the question first. For us, being on our own means we can set the agenda every day about what we want to do to earn money and how we're going about it. I was a salesperson for more than 10 years with a major corporation and it was very stressful. I had quotas to meet, missionary calls to make and my life was run by my supervisor. After a while, it became a burden and just a job rather than a career I was enjoying.

Lisa: My answer to your question would be the strain I felt commuting for nearly an hour each way and the sacrifices that were required from my family and the time it took away from raising the children. I just couldn't do it all when working 40 to 50 hours a week outside the home. Bringing up two boys and taking care of all the chores on top of a full-time job was not my ideal way of spending my life. I looked forward to opting out and our soap business seemed the perfect way to do it.

NEJE: So, the natural progression is to ask how you are doing.

Lisa: At this point, I would say "okay." Not as well as we need to do to generate the revenue we must have to both stay involved in the business full-time, but our growth is enough to give us the feeling we are going to make it.

Rick: There's an upside to Lisa's comment about us just doing "okay." I don't want to grow too quickly and to find we aren't able to ship the quantities that our retail and wholesaler accounts might order if we expanded our sales territory too quickly. The worst thing that could happen is if we obtained some serious retail distribution outlets, say a Stop & Shop or a Shaw's Market, and then could not fulfill the order quantities necessary to keep our product in stock. Growing as we are doing is the right way to handle the business.

NEJE: Sure as long as you can sell enough soap to put bread on your table, so to speak.

Rick: That's right, but we still have enough of a savings account buffer to last at least another year as we continue to grow the business. We're confident we can do it.

NEJE: How have you been creating customer interest in your soaps?

Lisa: We have been using a combination of things, like attending local and state fairs. We bring along two of our goats to attract attention to our booth and that's been very successful. We also sample the product around our local area of New Milford and have placed them in several retail stores. However, we've found that unless the store manager knows about our product and uses it personally, the retailer could care less about how well we are displayed and selling.

We are encouraging folks who are doing fundraising to use our product line to help raise money. We're also seeking product distribution in stores like Guido's in western Massachusetts and Whole Foods out of Greenwich, Connecticut. Whole Foods hasn't placed an order yet, but we filled out paperwork for their systems people last week and we hope to get our first order from them shortly.

Rick: To Lisa's point about attending state fairs, we are signed up for the "Big E" state fair in Massachusetts this coming summer. We will gain exposure to some one million fair goers during a 17-day period, something we have never been able to do before. If this proves as successful for us as we think it will, we may be on to something. Once we get our feet wet with the "Big E," it could lead to a decision to attend perhaps four, five, or even six big state fairs around the country each year. That could be our springboard to a really solid business—the key to making the Goatboy brand a national product.

NEJE: What about a marketing plan? Have you set priorities in how you're going to promote Goatboy?

Lisa: I have to be frank with you. We have a business plan, but I haven't put together a marketing plan yet.

NEJE: Because . . . ?

Lisa: I don't have a reason. We just haven't done it yet but I know we need to put one together. We haven't had money for advertising yet so I didn't feel a marketing plan was all that crucial. But one thing we do know: Sampling is the one sure way to build product awareness and interest. We've been anxious to meet new folks to put the soap in their hands and ask them to try it out. Once people try goat's milk

soap, they typically don't go back to regular store soap brands.

Rick: That's the most important aspect of our business we've found out so far. Sampling is critical. If we can get the consumer to try our product, we usually end up with a repeat customer. But it's tough to get distribution; a lot of wholesalers and retailers we've approached won't even return our phone calls. It's been frustrating.

Lisa: We're thinking of pursuing the "home party" route. Several women have talked to us about running home party fundraisers which they or a friend of theirs would run as independent consultants. We're ready to give 25 percent of all the money that is raised at the party to the host's favorite charity. Starting this activity will probably gel in the next month or so.

NEJE: What do you charge for a bar of your goat's milk soap?

Rick: We charge $5.00 a bar. I know that's considerably more than what commercial soap sells for in a supermarket, but each one of our bars weighs at least 5 ounces. That's a much better value than some competitive soaps sold on the Internet for $3.50 or $4.00 but the bar's weight is 3 ounces or so. We also offer "1 free with 3" on our Internet site, so that brings down the cost to under $4.00 per bar when consumers buy in quantity.

NEJE: Who do you consider your biggest competitors?

Lisa: That would be Vermont Soap Works and Kiss My Face. Both organizations have solid websites and, from what we can tell, do a terrific business. They're the ones we would like to model ourselves after.

NEJE: Have you been to any trade shows?

Lisa: Yes, we just went to our first one last month. It was a gift show up in Boston and we had tremendous success there. We signed up 23 new retail accounts and several have already reordered. Others are seasonal and haven't opened up for the summer yet so we are waiting to ship them an initial order.

Next year, we are thinking seriously of attending the New York City gift show. That's a lot more expensive, but the outcomes could be even greater than what we experienced in Boston.

NEJE: What about using the Internet, perhaps selling your product on eBay?

Rick: We've considered it but so far we don't think it's the way to go. There's no easy way to differentiate ourselves from our competition using eBay and we can't match the pricing from folks who mix their soaps in their basements and sell it in high volumes. Then there are resellers who also use thin margins to attract business and we can't compete with them.

NEJE: Who do you think is your typical consumer?

Lisa: That's an interesting question because there seems to be a split between the typical buyers of soap, female heads of households, verses the users who frequently turn out to be men. Women are mostly in charge of buying staple products for their families, no question there, but you would be amazed at the number of men who have approached us at fairs and up in Boston during the trade show who are curious about the values of using soap made from goat's milk. Moreover, the men who appreciate what our product can do for their skin either ask their wives to order the product from us or they contact us and buy it.

NEJE: Anyone ever tell you they wouldn't use your product?

Rick: Yes. About a quarter of the people we've talked to about trying our product say something like, "Oouuu . . . it's from a goat. No thanks!" That just reflects their ignorance about the value of goat's milk and how part of our culture is just so oriented toward cows that they can't conceive that goats can have similar, if not more, benefits to humans than cows do.

However, most people we meet are pretty open to the idea of using Goatboy soaps and that has been really fulfilling for us. We've just bought machinery that has increased our ability to make product to the point where we can comfortably meet our order demand by working two to three afternoons a week. If we start getting more orders, we definitely have the capacity to ramp up pretty quickly.

NEJE: Any regrets about leaving the corporate world for the life of an entrepreneur?

Rick: None whatsoever.

Lisa: Ask me in a year.

—L.W.

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A System Dynamics Approach to Assessing Public Policy Impact on the Sustainable Growth Rate of New Ventures

Jeff Trailer
Kuau Garsson

The growth of firms is fundamentally based on self-reinforcing feedback loops, one of the most important of which involves cash flow. When profit margin is positive, sales generate cash, which may then be reinvested to finance the operating cash cycle. We analyze simulations of a sustainable growth model of a generic new venture to assess the importance of taxes, and regulatory costs in determining growth. The results suggest that new ventures are particularly vulnerable to public policy effects, since their working capital resource levels are minimal, and they have few options to raise external funds necessary to fuel their initial operating cash cycles. Clearly, this has potential consequences in terms of gaining competitive advantage from experience effects, word of mouth, scale economies, etc. The results of this work suggest that system dynamics models may provide public policy-makers a cost-effective means to meet the spirit of the U.S. Regulatory Flexibility Act

The buzz of the stock market bubble of the 1990s has subsided in recent years and many companies are struggling to survive. This article analyzes the classical growth of the firm and explains certain important variables in finding a level of long-term sustainable growth for a firm of any size. We use a sustainable growth model utilizing cash conversion cycles, cash required, and profit margin to instantiate our data. Although substantial research exists on the economic impact of income taxation on labor and wages, "there is a paucity of comparable information regarding the impact of income taxation on entrepreneurial enterprises" (Holtz-Eakin and Rosen 2001: 1). The brevity of research on sustainable growth within academia seems to imply that controlling production function variables has long been determined much more important for economic advancement (Matsuyama 1999). Our study examines the impacts of public policy in terms of taxation and regulation costs.

Industrial Dynamics

Historically, success rates for new ventures have been abysmal, as "only 41.4% of new enterprises reach an age greater than five years" (Nord 1963: 1). In a more recent study, the success rate has remained about the same as, "66 percent fail within six years" (DeCastro et al. 1999). Studying this problem has proven difficult for researchers due to the dynamic complexity associated with the high number of interacting variables and their nonlinear feedback patterns and effects, which are all necessary to understand and explain firm performance over time. In recent decades, many improvements in modeling firms' growth patterns have taken place with the use of "system dynamics" mathematical modeling method, with Jay Forrester providing the first such model in Industrial Dynamics (Forrester 1961). Subsequent models have successfully revealed causal insights into the fundamental sources of corporate growth problems (Fey 1962; Nord 1963; Packer 1964; Forrester 1964, 1978; Roberts 1967, 1977; Roberts, Abrams and Weil 1968; Swanson 1969; Wright 1971; Lyneis 1975; Spencer 1978; Weil 1978; Sterman 1988, Bianchi 2002; Bianchi and Bivonna 2002, Oliva, Sterman, and Giese 2003).

The Regulatory Flexibility Act

The results of this work suggest that system dynamics modeling may provide public policy makers a cost-effective means to meet the spirit of the U.S. Regulatory Flexibility Act (1980). "The RFA requires agencies to review their regulatory proposals and determine if any new rule is likely to have a "significant economic impact on a substantial number of small entities." If such impact is likely to occur, the RFA then requires the agencies to prepare and make available for public comment an "initial regulatory flexibility analysis" (Whitmore and Walthall 2001: 40). Compliance with RFA currently seems to be a problem. "In monitoring agencies' compliance with the law over the years as RFA mandates, the Office of Advocacy found that federal agencies, more often than not, failed to conduct the analyses mandated by the RFA" (Whitmore and Walthall 2001: 41). System dynamics modeling allows the isolation of single variable adjustments for assessment within complex systems. Thus, the system dynamics method offers policy-makers a means of testing alternative policies to determine their potential impact.

System dynamics models, however, must be designed to meet a specific problem. This begs the question: Which problem, potentially caused by new public policies, is most likely to result in a significant economic impact on a substantial number of small entities? In this article, we focus on limits to growth of new firms caused by public policy effects on the capability to internally generate cash.

Internal Finance Theory of Growth

The greatest potential for causing a significant economic impact, on a substantial number of new and small firms, is arguably public policy effects on such firms' ability to self-

finance growth. This is due to the fact that the growth of most new and small firms is limited by the available quantity of internally generated funds (Butters and Lintner 1945; Ang 1991, 1992; Petersen and Rajan 1994; Weinberg 1994; Martinelli 1997; Bitler, Robb, and Wolken 2001; Becchetti and Trovato 2002; Carpenter and Petersen 2002; Arenas 2004). An "internal finance theory of growth" (Carpenter and Petersen 2002) explains the chronic nature of this phenomenon as being attributable to several attributes that negatively affect the cost of external capital. Younger and smaller firms tend to have higher failure rates. They lack diversity in terms of both products and markets. They rely on new products or new services. They tend to have thin management expertise, and lack a documented history (Jones and Kohers 1993; Martinelli 1997). Further, agency problems of both moral hazard and adverse selection tend to be more severe with younger and smaller firms (Martinelli 1997). This is due primarily to information asymmetries, or simply the lack of information at all, that has proven difficult for small firms to overcome (Apilado and Millington 1992; Binks, Ennew, and Reed 1992; Binks and Ennew 1996; Dennis and Sharpe 2005).

In this article, we will analyze simulations of the growth of a generic new venture. Our purpose is twofold:

1. To provide an example that illustrates the potential for the system dynamics method to assess the importance of taxes, and regulatory costs in determining growth, through a self-financed, sustainable growth model.
2. To provide a generic model with parameters that can be easily modified to reflect the different assumptions associated with different industries.

A Self-Financing Sustainable Growth Model

A company's sustainable growth rate depends on three factors:, the length of time in the firm's cash conversion cycle (CCC), the amount of cash required (CR) for each operating cash cycle (OCC), and the magnitude of the profit margin (PM), or the amount of cash generated from each dollar of sales (Churchill and Mullins 2001).

The first self-financing, sustainable growth rate factor, CCC, represents the average total amount of time cash is consumed in the firm's operations: from the purchase of material from suppliers, to carrying inventory, to collection of credit sales. The longer this cycle, the longer cash is tied up, and the slower the rate at which cash may be invested for growth. The maximum length of this cycle is called Operating Cash Cycle (OCC) and is determined by the sum of days required for carrying inventory and the days required for collection of accounts receivable. The calculation of OCC days required may be represented as:

$$\text{OCC (in days)} = (\text{Accounts Receivable}/(\text{Sales}/365))+(\text{Inventory}/(\text{Cost of Sales}/365))$$

The average cash conversion cycle (CCC) will be shorter than the OCC by the average days of accounts payable. Thus, the calculation of CCC days required may be represented as:

$$\text{CCC (in days)} = \text{OCC} - (\text{Accounts Payable}/(\text{Cost of Sales}/365))$$

The second self-financed, sustainable growth rate factor, cash required (CR), represents the average amount of cash required to finance one CCC. Cash required is a function of the magnitude of the firm's costs: cost of sales and operating expenses. As the firm finds ways to reduce costs per dollar of sales, a lower amount of cash is required to finance each operating cash cycle. The lower the amount of cash required for each cycle, the greater the growth rate for a given level of investment cash available. If it is assumed operating expenses are paid out uniformly throughout the cycle, then the cash required for each operating cash cycle may be represented as:

$$\text{CR (for each OCC)} = ((\text{Cost of Sales}/\text{Sales})^{*}(\text{CCC}/\text{OCC})) + ((\text{OCC}^{*}.5)/\text{OCC})$$

The third self-financed, sustainable growth rate factor, Profit Margin (PM), represents the cash generated per sales dollar, or the efficiency with which potential reinvestment dollars are generated on each dollar of sales. The greater the earnings per dollar of sales, the greater the reinvestment amount, and the greater the self-financeable growth rate. The profit margin may be calculated as:

$$\text{PM} = \text{Net profit after tax}/\text{Sales}$$

The self-financing growth (SFG) rate for one OCC may then be approximated as:

$$\text{SFG rate for each OCC} = \text{PM}/\text{CR}$$

The annual SFG rate is obtained from the product of the SFG rate for each cycle and the number of cycles in the year:

$$\text{Annual SFG rate} = (\text{PM}/\text{CR})^{*}(365/\text{OCC})$$

This rate may be compounded to obtain an annual rate:

$$\text{Compounded annual SFG rate} = (1+ (\text{PM}/\text{CR}))\ (365/\text{OCC})\ -1$$

Basically, expanding operations generates cash, which may then finance a larger operating cycle, which expands operations, resulting in a self-reinforcing feedback cycle (Figure 1).

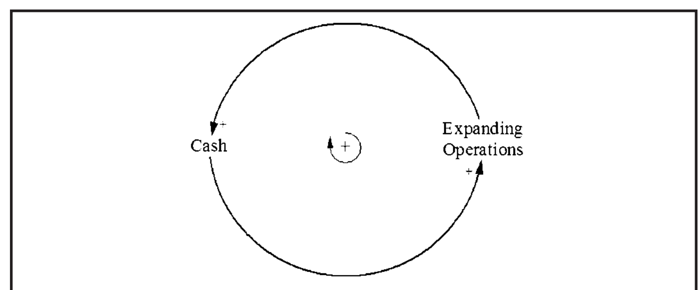

Figure 1. Self-reinforcing Feedback Cycle

However, as operations expand, the cash required to finance the operating cycle grows as well. This creates a balancing feedback effect on growth. Thus, the firm will grow only when the cash increases at the same or greater rate than the cash required (Figure 2).

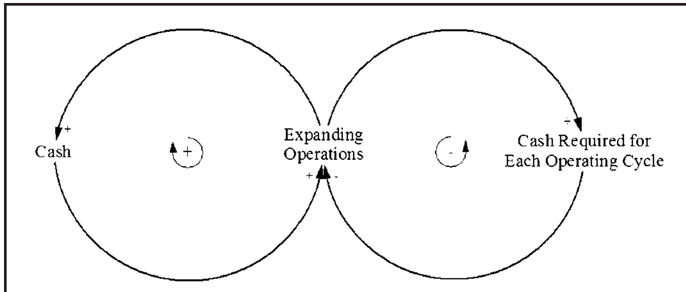

Figure 2. Balancing Feedback Effect on Growth

The dominant variable affecting the magnitude of cash generated from operations is the profit margin. Given the dynamics of compounded returns, ceteris paribus, small changes in profit margin will invoke large changes in the growth experienced by the firm. The longer the time period observed, the greater the impact of profit margin on growth. The exponential growth pattern is not necessarily due to increasing profit margin as the firm grows (Murphy, Trailer, and Hill 1996), but rather to the self-reinforcing feedback cycle of increasing investment in the operating cash cycle that occurs even when the profit margin is unchanging.

Given the exponential nature of this relationship between profit margin and growth, the short-run impact may be small even though the very long-run impact will be so strong that the firm will ultimately be blocked by constraints other than cash flow issues. The availability of adequate property, plant, and equipment are not typically the dominant limit to growth; rather the availability of management talent (Schumpeter 1951; Penrose 1959; Packer 1964), negative feedback effects of delivery delay (Forrester 1961; 1978), capacity-acquisition policy (Nord 1963), and service quality erosion (Oliva, Sterman, and Geise 2003; Sterman 1988, 2000) limit growth. Even when these latter constraints are resolved, the growth rate will ultimately be limited by the market saturation (Smith 1776; Sterman 2000). Thus, profit margin may be expected to have a significant impact on potential, maximum, sustainable growth rates. However, actual growth rates should be expected to be lower than potential growth rates when the time period covers many years or decades.

A Self-Financed, Sustainable Growth Model

In general, it is expected that policy-makers are susceptible to problems with decision making when the decisions are embedded in multiloop nonlinear feedback systems, because the human mind is not structured in a manner that accommodates such complexity (Forrester 1961; Sterman 2001). Public policy effects on the growth of new venture firms are especially associated with such complex systems. Growth of firms is fundamentally determined by nonlinear cost and revenue functions, each with their own, multiple, dynamics inputs, many of which include delays in their impact. System dynamic models offer a means of effectively overcoming such problems of complexity (Sterman 2000, 2001). Thus, to more effectively investigate the impacts of public policy on new venture growth, we built a dynamic simulation. The model is a system of nonlinear differential equations describing:

- One competitor that sells in a competitive market; the firm represents only one of many producers and it is assumed that the output of any one firm is not sufficient to alter the market price.
- The market will purchase as many units as this firm can produce, but will pay only a single (commodity) price.
- Nonlinear cost structure, reflecting the interaction of fixed and variable costs.
- A delayed, nonlinear impact on the sustainable growth rate from accounts receivable, accounts payable, cost of sales, operating expenses, sales tax, and regulation costs.

Model Structure

The model variables and their interactions are based on existing formulations of self-financable, sustainable growth rates (Churchill and Mullins 2001).

The model is comprised of five sectors: cash, accounts receivable, accounts payable, labor, and inventory

Cash Sector

Cash is generated by sales and consumed by operating expenses (Figure 3). Cash from sales is reduced by both sales tax and credit sales. Collections on credit sales generate cash. Any cash accumulated determines the budget for the next weekly order from suppliers.

Accounts Receivable Sector

Accounts receivable is generated by credit sales and depleted by collections (Figure 4).

Accounts Payable Sector

Accounts payable is generated by orders from suppliers and depleted by payments to suppliers (Figure 5). The order decision, in terms of the size of the order, is determined by the budget relative to the cost of the material.

Labor Sector

Labor is generated by the rate at which new hires can be

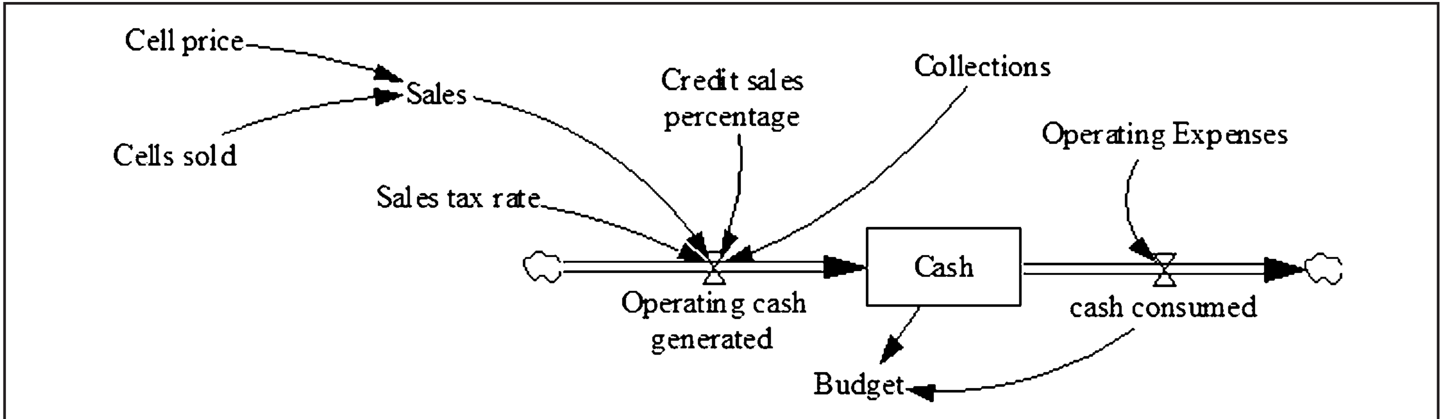

Figure 3. Cash Sector

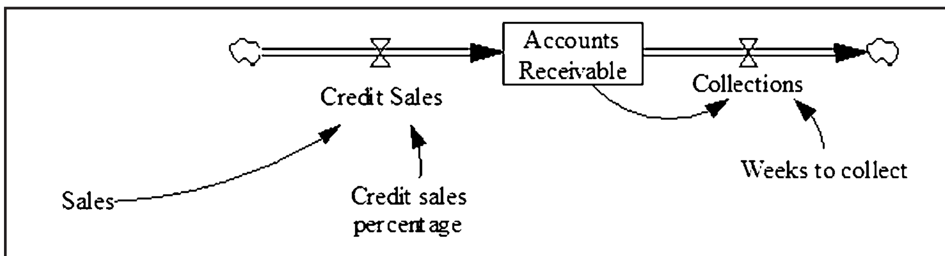

Figure 4. Accounts Receivable Sector

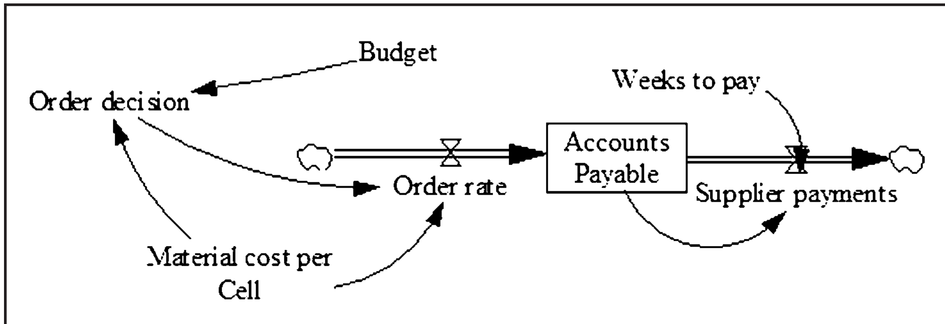

Figure 5. Accounts Payable Sector

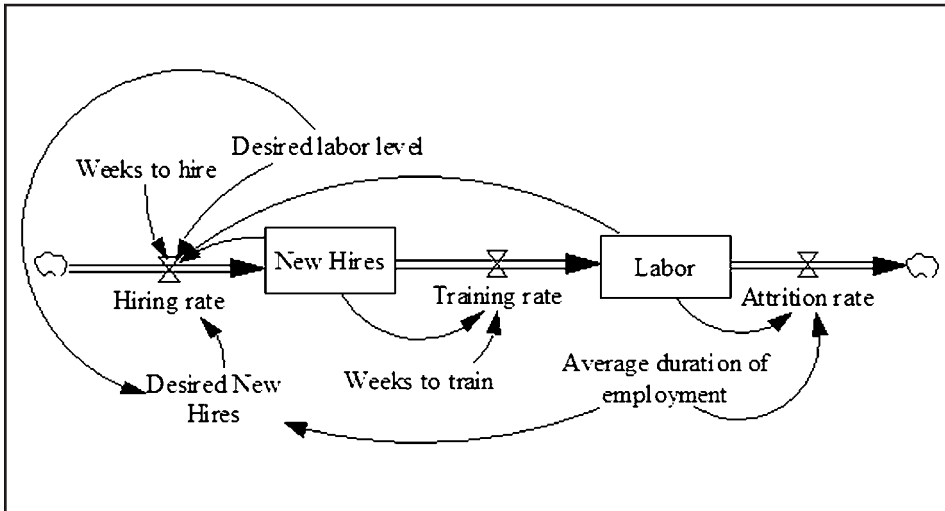

Figure 6. Labor Sector

recruited and trained, and is depleted via attrition (Figure 6). The hiring rate decision includes both the anticipated attrition rate, as well as the delay to the labor pool resulting from time in training.

Inventory Sector

Inventory is generated by the rate at which new orders are placed and subsequently received from suppliers, and the production rate (Figure 7). Inventory is depleted by sales. Accumulated sales determine the installed base, which is expected to influence productivity due to economies of experience.

The complete model is illustrated below, showing the linkages between the five sectors (Figure 8).

Growth Dynamics

Our growth dynamics model was used to test whether changes in public policy would have a "substantial" impact on the growth of new firms. In creating the model, the aspects of growth we considered important for public policy, were sales and jobs. Thus, our conclusions will focus primarily on these two variables.

A benefit of system dynamics modeling is that the impact of change in a single variable can be isolated for assessment. In this case, a baseline self-financeable growth (SFG) pattern was generated to serve as a control for isolating the impact of alternative public policies. In this model, the growth of the firm is limited only by internally generated funds. That is, it is assumed that the firm can sell

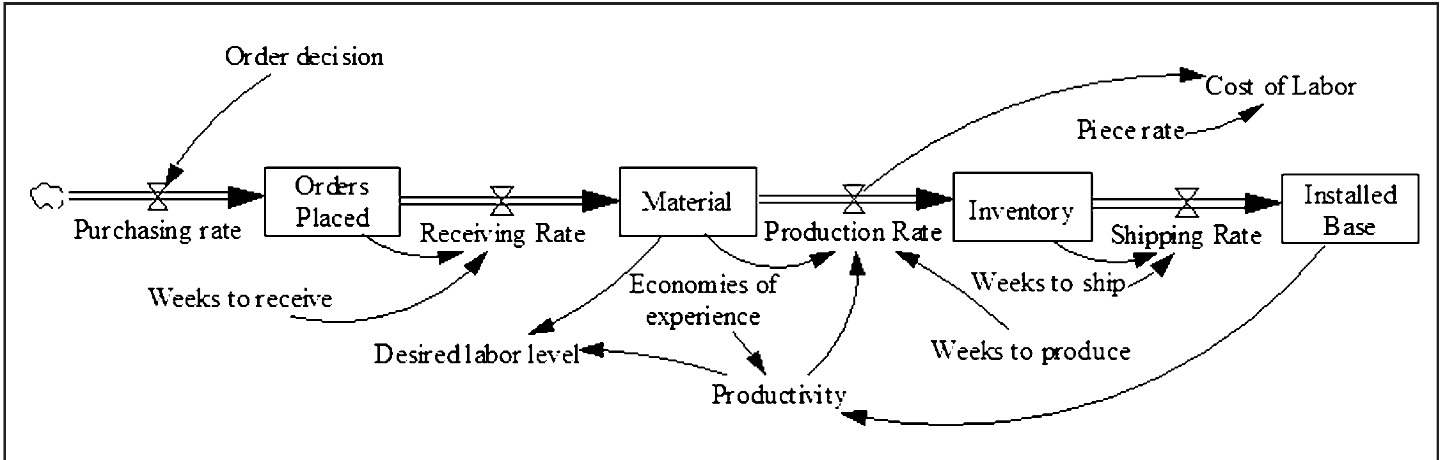

Figure 7. Inventory Sector

Accounts Receivable
Credit Sales
Collections
Cell price
Sales
Credit sales percentage
Weeks to collect
Cells sold
Sales tax rate
Operating Expenses
Cash
Operating cash generated
cash consumed
Weeks to decide
Budget
Weeks to pay
Order decision
Accounts Payable
Order rate
Supplier payments
Material cost per Cell
Cost of Labor
Weeks to receive
Piece rate
Orders Placed
Material
Inventory
Installed Base
Purchasing rate
Receiving Rate
Production Rate
Shipping Rate
Economies of experience
Weeks to ship
Desired labor level
Weeks to hire
Weeks to produce
Productivity
New Hires
Labor
Hiring rate
Training rate
Attrition rate
Weeks to train
Average duration of employment
Desired New Hires
New hire wage rate
Training wages

Figure 8. The Self-financing Sustainable Growth Model

as many units as can be produced, and the physical plant provides sufficient capacity for any production level over the two-year period studied. Also, labor and material are always available, although with a delay. Thus, the model generates a best-case or maximum potential growth of the new venture.

The simulation time was selected to be two years because it is generally the most restricted, for the entrepreneur, in obtaining external funding for growth. Bank managers we interviewed stated that they were reluctant to lend to firms with less than three years of documented operations. Thus, as discussed above, growth for the first couple of years is primarily dependent on the founders' own investment, and internally generated cash.

The public policies we studied were changes in the sales tax rate, and federal regulation costs. In the following sections, data is presented that show how changes in these policies affect the potential growth rate of a new venture.

Growth Dynamics: Impact of Changes in the Sales Tax Rate

We simulated four sales tax scenarios. Sales tax was 7 percent in the baseline and we compared it to: a sales tax increase of 1 percent (total tax of 8%); a decrease of 1 percent (total tax of 6%); and the elimination of sales tax (total tax of 0%). Because the latter scenario had such a strong impact, the results for that scenario are reported separately, last.

Sales tax is typically applied only to final sales so the model assumes the product is sold to the end consumer. Additionally, the model assumes the product is of an industry standard and sold internationally, and so the price is set by the market. Accordingly, to be competitive, the firm must pay the sales tax out of the given market price. These assumptions illustrate the comparative advantage associated with competing counties', states', or nations' sales tax policies.

The accumulating resource variables selected for presentation in this section illustrate the general dynamics of new venture growth.[1]

Cash

The entrepreneurs launch their business with $10,000 in available cash. The cash performance is presented in Figure 9. The entrepreneur runs out of cash in weeks six and seven, and accordingly requires a cash infusion of about $1,000 for week six and $200 for week seven. We assume the entrepreneur uses a personal revolving credit line, likely a credit card, to prevent insolvency. This seems consistent with the SBA report that about 50 percent of small businesses use credit card debt. This negative cash flow occurs because there initially are no sales to cover the costs of work-in-process. Eventually, sales occur and cash is available for reinvestment in material and labor. The erratic pattern in cash is entirely due to the firm's own internal structure of delayed feedback effects on the ordering decision.

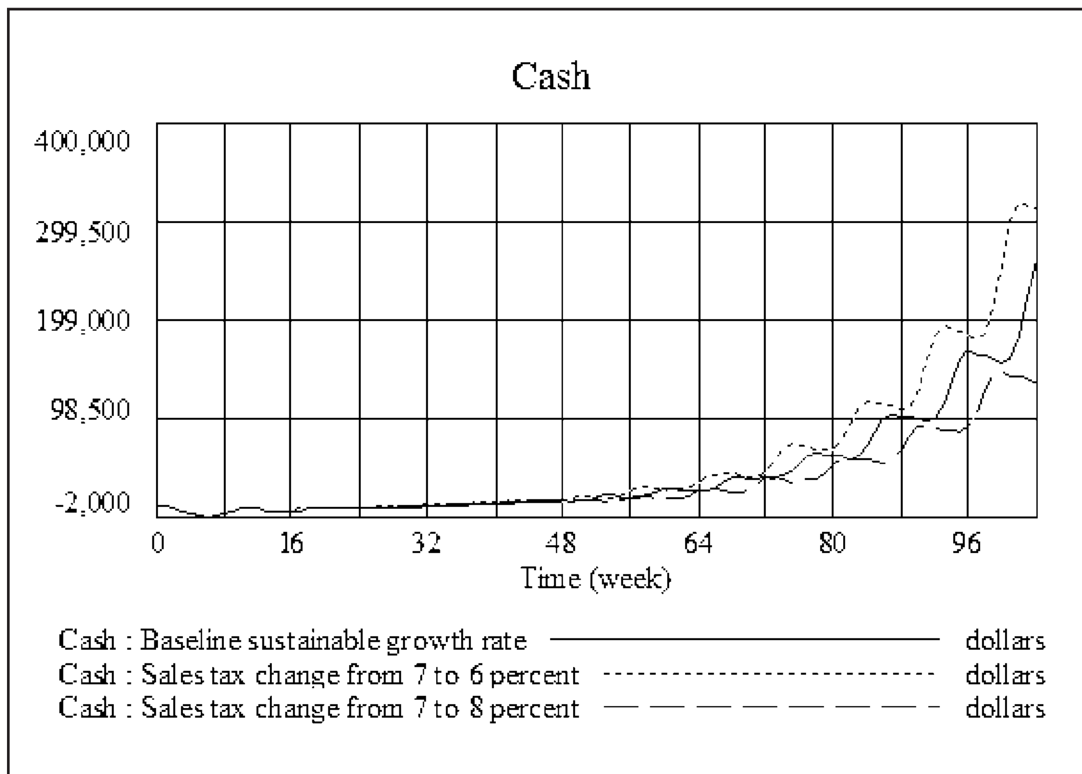

Figure 9. Cash Performance

Sales

The rate of sales exhibits the nonlinear growth pattern typical in a new product life cycle. The seemingly erratic changes are in fact completely deterministic, not random, effects of the multiple, internal feedback loops. The impact of changes in the sales tax rate are clearly visible in the sales figure: the increase of 1 percent to 8 percent reduces the comparative sales per week almost 25 percent, at the end of the second year of operations, from $150,335 to $113,087; the decrease of 1 percent to 6 percent increases the sales per week more than 30 percent at the end of the second year of operations, from $150,335 to $196,549.

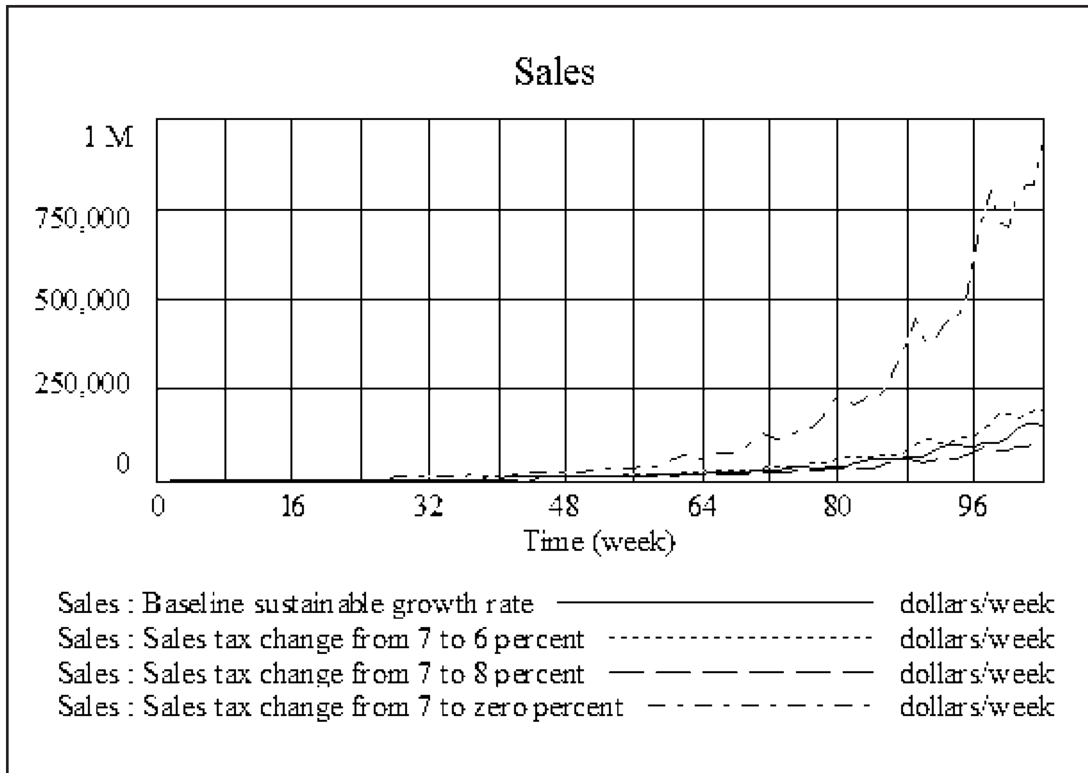

Figure 10. Impact of No Sales Tax on Sales

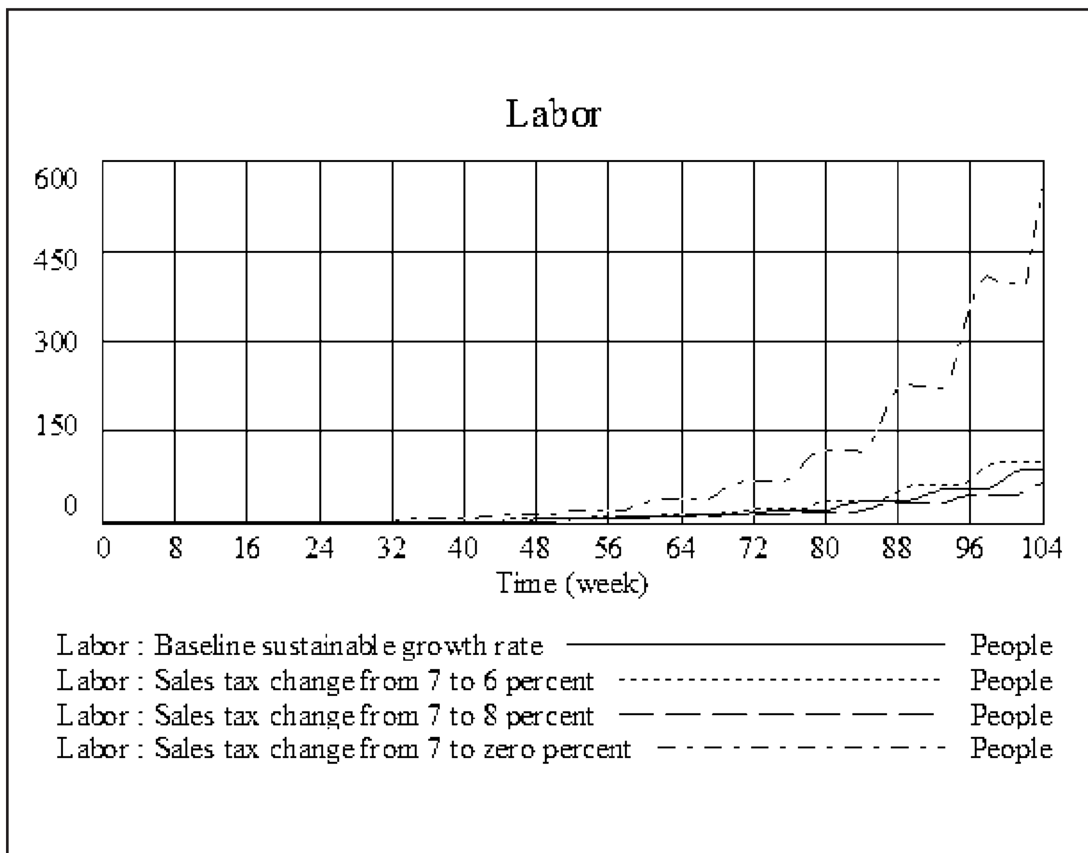

Figure 11. Impact of No Sales Tax on Labor

The implication for the competitiveness of firms is that higher sales tax rates reduce profit margin, which reduces cash available to be reinvested for growth. If competing firms face similar constraints in terms of credit sales, and suppliers' credit terms, new ventures operating in regions with relatively high sales tax will experience normal exponential patterns of growth, but at a slower rate. Ultimately, it has potential consequences in terms of gaining competitive advantage from experience effects, word of mouth, scale economies, etc. Eventually, when the product market matures, the firms with slower growth rates will be eliminated from the market by their larger counterparts, as the larger firms achieve cost and market power advantages. The slower growth and ultimate elimination of these firms has consequences for the employment rate for the region.

The advantage of operating in a region with no sales tax is illustrated in Figure 10. The sales per week at the end of year two is $943,647 in the region with no sales tax, versus sales of $150,335 in the baseline SGR. This is a 600 percent increase in rate of sales.

Labor

Alternative sales tax policies have very little impact on job growth over the first year of operations. The firm grows from one employee to five under each policy. By the end of the second year, however, the typical nonlin-

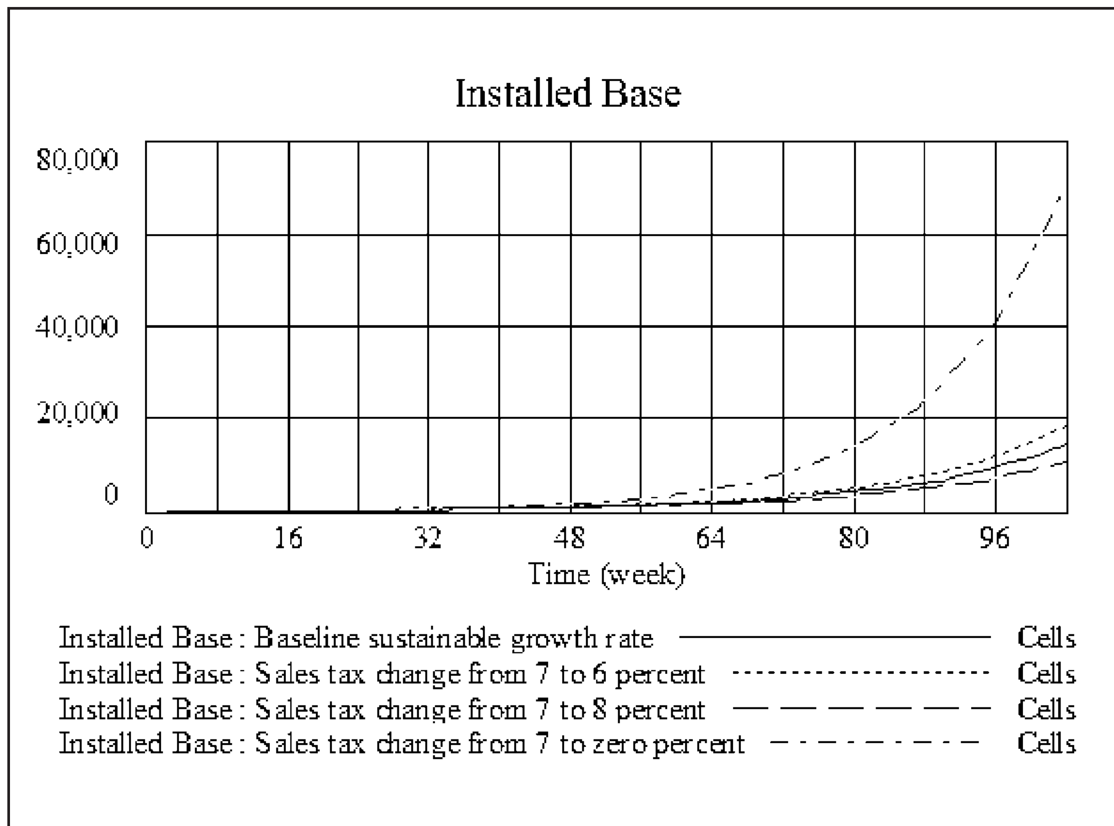

Figure 12. Cumulative Sales and Installed Base

ear growth pattern is apparent as small initial differences have large consequences. By the end of the second year, the baseline SGR has employed 87 people. Operating under the higher sales tax created only 66 jobs (25% less), and operating under the lower sales tax rate the firm created 99 jobs (14% greater).

The impact of operating in a region with no sales tax is illustrated in Figure 11. Employment at the end of year two is 560 in the region with no sales tax, versus the employment of 87 people in the baseline SGR. This is a more than 649 percent greater rate of job creation.

Installed Base

Cumulative sales are reflected in the installed base figure. Under the baseline SGR, cumulative sales by the end of the second year are 14,571 units, versus 10,845 units (25% less) under the higher sales tax, and 18,659 (28% greater) under the lower sales tax, and 70,853 (486% greater) with an absence of sales tax (Figure 12).

Growth Dynamics: Impact of Changes in the Costs of Regulation

Four regulation scenarios were simulated. Regulation compliance costs were treated as a fixed expense in these scenarios. Regulation costs are not always fixed; however, the effect of variable expenses is captured in the preceding section, so the simulations in this section illustrate the general growth dynamics associated with fixed expense impacts.

In the baseline SGR, there exist no regulation costs, so the SGR is the same as in the previous section. Those alternative regulation compliance scenarios reflect the actual, average cost(s) for firms with less than 20 employees for: environmental costs ($3,328 annually), tax compliance ($1,202 annually), workplace ($829 annually), and all regulation ($6,975 annually; equals the sum of the previous categories and includes economic costs) compliance costs (Crain and Hopkins 2001). In the model, regulation expense is assumed to be paid out evenly throughout the year, so the annual cost is divided by 52 weeks and added to weekly operating expenses.

Sales

As illustrated in Figure 13, the impact of regulation expense on sales is potentially significant. The baseline SGR, in sales per week, was $150,335. The SGR including workplace regulation costs was $160,783, an improvement of 7 percent. This positive impact is only an artifact of the cyclic patterns of growth. The overall impact is negative, but only slightly. The SGR including tax compliance costs was $136,996, an impair-

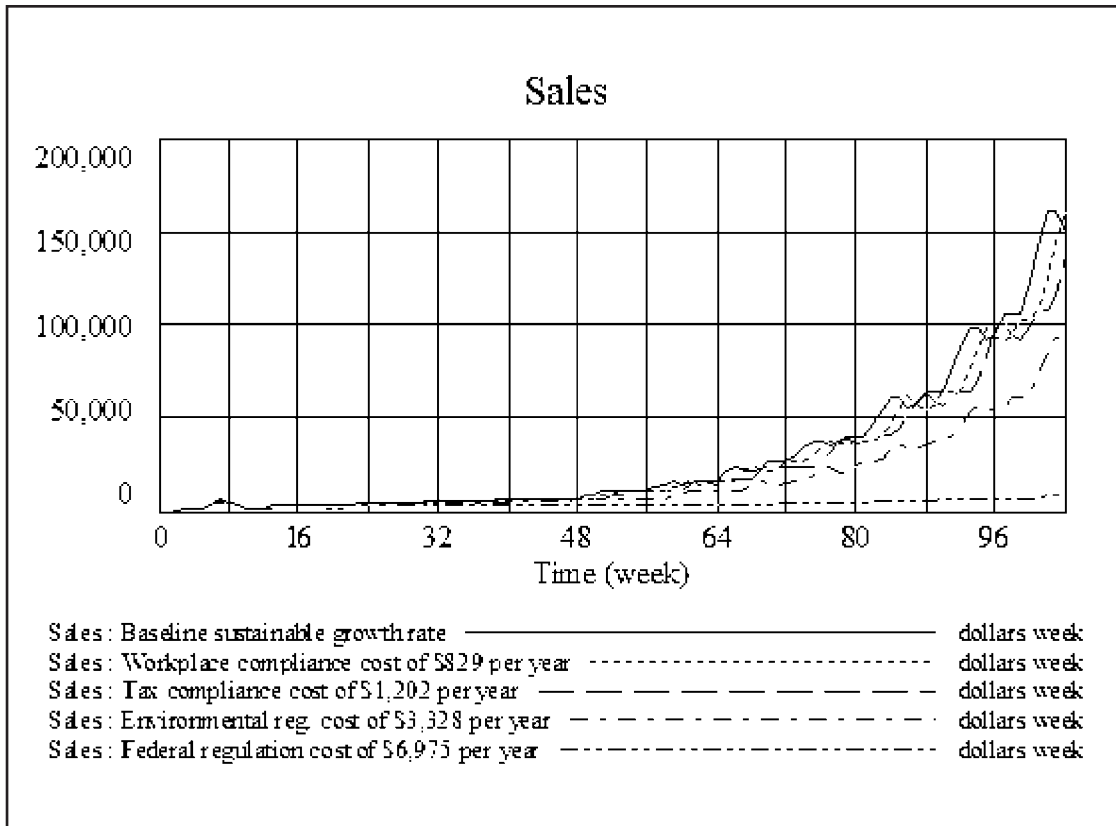

Figure 13. Impact of Regulation Expenses on Sale

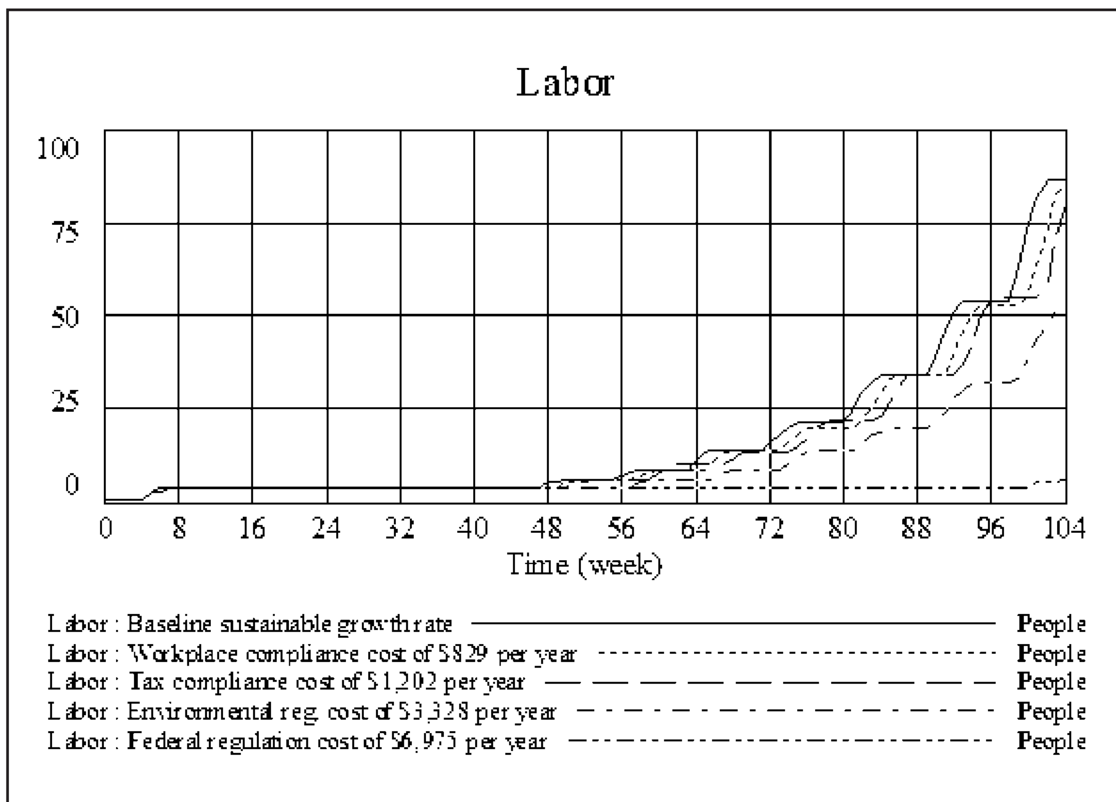

Figure 14. Impact of Regulation Expenses on Labor

ment of 9 percent. The SGR including environmental regulation compliance costs was $91,211 a 39 percent decline. The SGR including all regulation costs was $9,171, a 94 percent decline. The latter indicates the potential significance of regulation costs on firm growth. In this case, the profit margin is almost entirely eliminated, and so there exists virtually no cash to reinvest into the firm.

Labor

Figure 14 illustrates that the impact of regulation expense on employment is potentially significant, as noted with sales previously. The baseline SGR, in the number of accumulated jobs, was 87. The number of jobs created when including workplace regulation costs was 86, a decrease of only 1 percent. The number of jobs when including tax compliance costs was 80, an impairment of 8 percent. The number of jobs when including environmental regulation compliance costs was 51, a 41 percent decrease. The number of jobs when including all regulation costs was only 6, a 93 percent decrease. The latter indicates the potential significance of regulation costs on job growth. As mentioned above, in this case, the profit margin is almost entirely eliminated, and so there exists virtually no cash to reinvest into the firm, so production fails to grow.

Conclusions

The growth of firms is fundamentally based on self-reinforcing feedback loops, one of the most important of which involves cash flow. When profit margin is positive, sales generate cash, and this cash can be reinvested to finance the operating cash cycle. As more cash becomes available, more material and labor may be employed in each cycle, generating more cash, allowing greater investment, etc. Consequently, in the absence of limits to growth, the growth dynamics of the firm are compounded returns, and ceteris paribus, even small changes in profit margin will invoke large changes in the growth experienced by the firm. The results of these simulations, involving both variable and fixed expense impacts from public policy, illustrate the nonlinear nature of the relationship between profit margin and growth; the short-run impact may be small and hardly noticed, but the long-run impact may be quite strong.

Both types of public policy, sales tax and regulation compliance cost, had significant impacts on the sustainable growth rate of the model firm. The results suggest that new ventures are particularly vulnerable to public policy effects, since their working capital resource levels are minimal, and they have few options to raise external funds necessary to fuel their initial operating cash cycles. Clearly, this has significant detrimental consequences in terms of gaining a competitive advantage from experience effects, word of mouth, scale economies, etc. Eventually, when the product market matures, the firms with slower growth rates will be eliminated from the market by their larger counterparts, as the larger firms will have achieved cost and market power advantages. The slower growth and ultimate elimination of these firms have consequences for the employment rate of the region. Thus, the results seem to suggest that, in general, public policies should strive to avoid placing costs on new ventures for the first two to three years of operations. The exponential growth patterns will generate sales and jobs after the first couple of years, which may subsequently offset the initial public revenue lost.

Limitations

For regulators to use this method to evaluate policy recommendations, rather than using a single exemplary business, some additional models would need to be developed so that together the set faithfully represented the range of actual start-up business types in the industry of concern. Further, within each type of business, the model parameters would need to be set to ensure consistency with the actual range of structural characteristics in that industry. That is, given the complex, nonlinear relationship between business profits and regulatory effects on firm growth, aggregate effects of regulation may be quite different than the effect of regulation on the average businesses.

The model developed here does not study the potential negative impacts on growth resulting from competitors' actions. Such competitive dynamics are possible to model (Warren 2002), but the inclusion of these dynamics would tend to obfuscate, rather than clarify, the potential economic impact of public policy since such models would investigate a pessimistic outlook as opposed to an optimistic one. If, however, a potential public policy is intended to alter, or steer, competitors' reactions to start-ups, then the model here would need to be extended, substantially.

Future Research

There is strong belief by many of the importance of government policy in helping small entrepreneurs through subsidies such as SBA loans, micro credit programs, and "infant industry argument." However, one deduction to be drawn from this article is that the extra taxes needed for such programs will have a disproportionately negative effect on those smaller, younger firms, as they are the most vulnerable—the very ones the government intends to help. Further, such firms are the least likely to actually receive and benefit from such external government-funded finance because, like private lenders, public lenders will be frustrated by the inherent agency problems, and high risk of smaller, younger firms. Such implications are worthy of future empirical investigation.

Overall, the results of this work suggest that system dynamics modeling may provide public policy-makers a cost-

effective means to meet the spirit of the U.S. Regulatory Flexibility Act (1980). System dynamics modeling allows investigators to isolate the impact of specific variables for assessment within complex systems. In this case, a baseline self-financing growth pattern was generated to serve as a control for isolating the impact of alternative public policies. This would seem to be, at least partially, a significant solution to the problem of assessing potential impact. Given that compliance with RFA is a problem (Whitmore and Walthall 2001), we hope the results provide a path of opportunity for public policy-makers.

Endnote

1. The model presented in this article is available from the author. The model may be run using Vensim PLE, which is fully functional system dynamics software that is free for personal and educational use. Vensim PLE is shareware for commercial use, and comes complete with a help engine, and Adobe Acrobat format PLE User's Guide. You can download Vensim PLE at: http://www.vensim.com/download.html.

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Model Variable Definitions

Accounts payable: Calculated as the total accumulation of Order rate less Supplier payments. The initial value is set at zero dollars. Units in dollars.

Accounts receivable: Calculated as the total accumulation of Credit sales less Collections. The initial value is set to zero. Units in dollars.

Attrition rate: Calculated as Labor divided by Average duration of employment. Units in people/week.

Average duration of employment: Constant at 100. Units in weeks.

Budget: Calculated as the maximum of (Cash/Weeks to decide)—cash consumed, or zero. Units in dollars/week.

Cash: Calculated as the total accumulation of Operating cash generated less Cash consumed. The initial value was set to $10,000. The argument for the initial amount is that the SBA reports that half of all new ventures in the United States are started with $10,000 or less. Units in dollars.

Cash consumed: Calculated as Supplier payments + Cost of labor + Operating expenses + Training wages. This is intended to capture the reduction in cash due to operating expenses and the delayed expenses of cost of sales. Units in dollars/week.

Cell price: Constant at $200 per cell. Units in dollars/cell.

Cells sold: Calculated as Shipping rate per week. Units in cells/week.

Collections: Calculated as Accounts receivable divided by Weeks to collect. Units in dollars/week.

Cost of labor: Calculated as Piece rate multiplied by Production rate. Units in dollars/week.

Credit sales: Calculated as Sales * Credit sales percentage. Units in dollars/week.

Credit sales percentage: Constant at 20 percent of Sales. Units were dimensionless.

Desired labor level: Calculated as INTEGER (Material/Productivity). Units in people.

Economies of experience: Constant at 1. Units in cells.

Inventory: Calculated as the total accumulation of Production rate less Shipping rate. The initial value was set to zero. Units in cells.

Hiring rate: Calculated as the maximum of (Desired labor level – Labor - New Hires) / Weeks to hire, or zero. This is intended to prevent a negative hiring rate. Units in people/week.

Installed base: Calculated as the accumulated Shipping rate. Units in cells.

Labor: Calculated as the total accumulation of Training rate less Attrition rate. Units in people.

Material: Calculated as the total accumulation of Receiving rate less Production rate. The initial value was set to zero cells. Units in cells.

Material cost per cell: Constant at $90. Units in dollars/cell.

New hires: Calculated as the total accumulation of Hiring rate less Training rate. The initial level was set to zero people. Units in people.

New hire wage rate: Constant at $300. Units in dollars/(week*People).

Order rate: Calculated as Order decision multiplied by Material cost per Cell. Units in dollars/week.

Operating cash generated: Calculated as Sales * (1 - Credit sales percentage)) + Collections - (Sales * Sales tax rate). This is intended to capture the reduction in sales-generated cash due to credit sales, and sales tax payments. Units in dollars/week.

Operating expenses: Constant at $400 per week. Units in dollars/week.

Order decision: Calculated as IF THEN ELSE (Budget < $10,000, INTEGER (Budget / Material cost per Cell)/2, INTEGER (Budget / Material cost per Cell)). Units in cells/week.

Orders placed: Calculated as the total accumulation of Purchasing rate less Receiving rate. The initial value was set to 20. Units in cells.

Piece rate: Constant at $50 per Cell. Units in dollars/cell.

Production rate: Calculated as the minimum of Material / Weeks to produce or (Labor * Productivity) / Weeks to produce). Intended to limit production to the level dictated by the average productivity of labor. Units in cells/week.

Productivity: Calculated as 20+LN ((Installed Base / Economies of experience) +1). This is intended to capture a learning curve effect on productivity. Units in cells/people.

Purchasing rate: Calculated as the maximum of Order decision, or zero. Units in dollars/week.

Receiving rate: Calculated as Orders placed divided by Weeks to receive. Units in cells/week.

Sales: Calculated as Cell price * Cells sold. A cell is a high technology, dynamic, random access memory chip. These Cells conform to industry standard specifications, and are typically used by consumers in a wide range of hand-held electronic devices. Units in dollars/week.

Sales tax rate: Constant at 7 percent of Sales, unless otherwise specified. Units are dimensionless.

Shipping rate: Calculated as Inventory divided by Weeks to ship. Units in cells/week.

Supplier payments: Calculated as Accounts payable divided by Weeks to pay. Units in dollars/week.

Training rate: Calculated as New hires divided by Weeks to train. Units in people/week.

Training wages: Calculated as New hires multiplied by New hire wage rate. Units in dollars/week.

Weeks to collect: Constant at four weeks. Units in weeks.

Weeks to decide: Constant at one week. Units in weeks.

Weeks to hire: Constant at one week. Units in weeks.

Weeks to pay: Constant at three weeks. Units in weeks.

Weeks to produce: Constant at three weeks. Units in weeks.

Weeks to receive: Constant at two weeks. Units in weeks.

Weeks to ship: Constant at one week. Units in weeks.

Weeks to train: Constant at two weeks. Units in weeks.

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Does My Business Need a Human Resources Function? A Decision–Making Model for Small and Medium-Sized Firms

Golbou Ghassemieh
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The questions of when and what types of human resource (HR) support are needed tend to be unanswerable for small and medium-sized enterprises (SMEs). This article addresses this gap in the strategic HR literature. Hiring, training, employee retention/satisfaction, wages and benefits programs, and worker's compensation insurance are important to SMEs seeking to build strong capabilities and resources and to increase their competitive advantage. This article presents an analysis of the existing HR literature for SMEs. It introduces a decision model to help SMEs choose a cost-effective HR strategy, listing a range of options from hiring the HR function to electronic HR (eHR) and outsourcing

Town Grocery, a company with 350-plus employees in Northern California, is an example of a local medium-sized business with no Human Resources (HR) Department.[1] Management, as well as lower level employees, have questioned the lack of HR at Town, and have yet to find a resource that points to an answer. It is not uncommon for small and medium-sized enterprises (SMEs) to ask when a formal HR function should be added to their administrative/overhead cost structures. Town, a typical community-based business, is a slow growth business, with plans to open a third store sometime in the future. Management is clearly facing a number of costly problems, such as numerous worker's compensation claims, higher worker's compensation insurance premiums, and a lack of adequate store training, among others. The management team at Town has divided various aspects of classic HR tasks among itself and other store administrators. This is a typical strategy of SMEs; however, the team not only lacks adequate HR training, but also has spread itself too thin. These issues, not uncommon to small businesses that lack HR, are preventable and resolvable—if the most cost-effective HR strategy is identified and implemented.

SMEs are defined by the number of workers employed: 1–100 is considered small; 101–5,000, medium (Wager and Langrock 2003a; Hornsby and Kuratko 2003). Town Grocery is one of an estimated 15 to 17 million SMEs in the United States (Case 2001). SMEs employ an estimated 60 percent of the total U.S. workforce (Watson and Everett 1993; Appelbaum and Kamal 2000). Despite their disproportionately large role as employers in the U.S. economy, SMEs tend to have a very high failure rate—approximately 80 percent in the first 10 years of business (Ibrahim and Ellis 1993; Appelbaum and Kamal 2000). SMEs are more likely to survive and sustain a competitive advantage over larger rivals via increasing employee satisfaction, which, in turn, minimizes turnover, absenteeism, and lost productivity costs (Porter 1990; Appelbaum and Kamal 2000). Implementing a strategic HR function in SMEs thus can be a key element to increasing competitive advantage (Augustine and Wilson 1994; Huselid 1995; Klass et al. 2002).

SMEs that can afford to staff an HR function may also prevent costly mistakes. For example, each time a poorly trained employee misinforms a customer or handles a sale incorrectly, money is lost and in a "worst-case" scenario, a lawsuit may ensue. When employees lack simple safety training, otherwise preventable injuries can occur, resulting in increasing worker's compensation claims and higher insurance premiums. A well-designed HR function can resolve employee grievances; deal with employee benefits, training, worker's compensation cases; and implement team-building activities to strengthen the internal network, as well as handle many other employee-related issues. Though large corporations have a multitude of options when it comes to choosing and implementing HR functions, SMEs face significant hurdles to making an investment in HR functions or outsourcing those to consulting firms. These challenges include: inability to reach economies of scale, lack of revenue scale, and insufficient cash flow (Klass 2003).

The next section presents an analysis of the literature about the extant options for implementing HR in SMEs. The options range from hiring for an HR function or formal department, to electronic/internet-based HR (eHR), to outsourcing. The article closes with an examination of a decision model to help SMEs make more informed decisions and a discussion of how practitioners can use this model to develop and implement an HR strategy.

Relevant Research Orientations

Human Resource Management (HRM) is defined as the "process of attracting, developing, and maintaining a talented and energetic workforce to support organizational mission, objectives, and strategies" (Schermerhorn 2001: 240). There are two aspects of managing human resources, the administrative and the strategic. The administrative side of HR is more tactical, including tasks such as filing hiring paperwork,

payroll, benefits and compensation enrollment (Davidson 2003). Strategic HR acts as a business partner to overall business management by providing employee retention strategies, talent management, and other services that add value to the company's business strategy (Davidson 2003).

According to Porter (1990), the human resources function is the backbone of organizational strategy and competitive advantage. Small business managers are faced with the same organizational issues that need to be addressed by managers of larger corporations (e.g., job specialization, departmentalization, chain of command, span of control, centralization and decentralization, and formalization) (Robbins 2000). How these questions are answered typically depends on the size of the organization, its stage of growth, and the company's chosen industry environment.

Many SMEs choose a simple structure, characterized by wide spans of control, authority centralized in a single person (usually the manager/owner), and little formalization (Robbins 2000). Simple structures and low levels of departmentalization are said to account for the agility and flexibility of SMEs (Harel and Tzafrir 1999; Cassel et al. 2002). Simplicity of form and function also carry attendant risks of information overload at the top level of the organization as well as an overreliance on the manager/owner for direction (Hornsby and Kuratko 2003). The multifarious responsibilities and pressures that SME managers/owners face thus present a time management dilemma. Much of the stress of handling employee relations and practices can be alleviated through some form of HRM implementation, allowing managers/owners to have the time needed to handle more important or cost-effective tasks (Krieger 2003). Ideally, managers/owners should have the freedom to focus their energies on business strategy, on improving their awareness of the industry and the competitive environment, on the financial underpinnings of their businesses, and on marketing efforts; essentially, on conducting the "business of the business" (Krieger 2003).

For most SME managers/owners, implementing HR functions without sufficient expertise can be a risky proposition given the nature and severity of compliance laws such as EEOC, ADA, COBRA, OSHA, INS, etc. (Krieger 2003). Major HR functions include: (1) recruiting and hiring, (2) training and motivation, (3) compensation and benefits, and (4) developing metrics to gauge the contribution of intangible human assets to enterprise value. The extant literature regarding how those major functions are performed is examined below in greater detail.

Recruiting and Hiring

What attracts workers to a small business in the first place? Some researchers argue that the lack of formality breeds a more personal environment with better relationships, others are not convinced that better relationships exist in SMEs (Rowden 2002a; Vinten et al. 1997). Despite the appeal of a close-knit work environment in the smaller firm, employee recruitment is the top concern for owners and managers of SMEs; this is, in part, due to high staff turnover and limited pools of qualified candidates (Hornsby and Kuratko 2003). A study of Canadian SMEs shows that 51 percent of respondents rely on the president or chief executive officer to hire employees, 31 percent rely solely on the owner of the business, and 18 percent have a manager or other employee assigned to the task of recruitment (Wager and Langrock 2003a).

Healthy interpersonal relationships at work also appear to be positively associated with increased employee efficiency (Vinten et al. 1997). For most SMEs, recruiting is largely the responsibility of senior management, or sometimes lower-level employees (i.e., who are not trained in recruitment practices) (Wager and Langrock 2003a). The standard cost of losing an employee for SMEs, one half times the employee's annual salary, is considered costly given the limited resources available to many SMEs (ASTD 2003; Saratoga Institute 2003). However, few empirical studies have been conducted on the hiring practices of SMEs, and little is known about HR hiring practices in very small businesses (Wager and Langrock 2003a).

Training and Motivation

Once a small business has recruited and hired employees, keeping them trained and motivated to be productive in their jobs can be challenging. Yet, research has shown that a "well-motivated, highly skilled workforce is a determinant of a small firm's ability to remain competitive in the contemporary business environment" (Hornsby and Kuratko 2003: 2).

Other research has also shown that employee training is a similarly important determinant of growth, though SMEs are sometimes reluctant to train employees who may not stay (Wager and Langrock 2003b). Workplace training, a factor that has been shown to correlate highly with employee satisfaction and turnover, is often less accessible to small employers than to large corporations (Devins and Johnson 2003). Although employee retention is affected by low pay, it is more impacted by "inadequate job/personal satisfaction" (Appelbaum and Kamal 2000).

Increased customer satisfaction, higher sales, and improved technical skills are often worth the extra financial outlay to train staff (Vinten et al. 1997). Two empirical studies indicate that the training practices of SMEs in the United States have not changed in over a decade (Hornsby and Kuratko 2003). While researchers agree intuitively that training positively impacts both sales and growth of SMEs, empirical research on SMEs to date has yet to substantiate this claim (Rowden 2002a). Clearly, more research in how SMEs

train staff and the resultant impact on firm performance is warranted (MacMahon and Murphy 1999).

Finally, though company training and development is a key factor in promoting employee motivation, research has also shown that job satisfaction is positively impacted by the level of employee autonomy, team or group cohesion, relationships and trust, and organizational culture or climate (Appelbaum and Kamal 2000). SMEs need to keep focused on these important elements as well as create an environment that enhances motivation.

Compensation and Benefits

After recruitment, hiring and training, employee compensation and benefits are the next highest concerns among owners and managers of SMEs (Hornsby and Kuratko 2003). While most SMEs cannot afford to pay corporate salaries (Rowden 2002a), there is some evidence that employee equity compensation has a positive impact on growth of SMEs (Arbaugh et al. 2004). Compensation is perhaps the most obvious incentive for employee retention and productivity, however other equally effective motivators have been identified, including commitment to the company's vision, the job itself, skill level, and performance recognition (Huselid 1995; Burke 1997).

Many SMEs are starting to offer incentives such as year-end bonuses, profit-sharing plans, stock options, and "gainsharing" (Welbourne et al. 1995; Graham and Welbourne 1999; Shutan 2003; Arbaugh et al. 2004). However, employees are more concerned about receiving health insurance and worker's compensation benefits. Since an estimated 42 million Americans are without health insurance at the time of this writing (Hill 2004), a core issue for public policy is to what extent the private sector should be responsible for its workers' health. For many SMEs the costs associated with providing health insurance are significant. Self-funding and network providers are some lower cost options; however, SMEs need to consider how to rate those services for coverage options for medical and dental insurance (Shutan 2003). Worker's compensation premiums are often even more costly than health insurance. Rates are usually based on company safety records, which emphasizes the importance of internal safety programs, another function that rolls into HRM (Shutan 2003).

Concomitant to fostering a positive working environment and intrinsic motivators, compensation should match the work that employees perform. There is a need for clarity when it comes to job duties, employee expectations, and compensation. (Appelbaum and Kamal 2000). A job description that matches the realities of the job is necessary and used by employees when developing their perception of equitable pay. Beyond job descriptions, experts recommend that SMEs "contact an accountant, trade association, the Bureau of Labor Statistics (BLS), or a combination thereof to determine appropriate salaries, cost ratios, and profit margins" (Shutan 2003: 2). Knowing how competitors measure up in their compensation packages is important and valuable information for owners and managers of SMEs. Benchmarking is a useful and needed tool in developing compensation (Shutan 2003).

HR Metrics and Enterprise Value

Many SMEs view human resources as a "process and a cost" (Mathis 2003). However, the role of HR in organizations is increasingly becoming more of a strategic business partner than a formal administrative function (Becker et al., 2001; Davidson 2003; Becker and Huselid 2003). As a consequence, HR metrics organizations, such as the Saratoga Institute and the Society for Human Resource Management (SHRM), offer their metric consulting services to firms who want to see the cost-benefits analysis of their HR departments (Becker et al., 2001; Davidson 2003).

A recent study shows that 85 percent of a company's assets are intangible, and 43 percent of HR competencies provide a strategic contribution. Thus, deriving the allocable HR costs and contributions can be key to the overall valuation of an enterprise (Weatherly 2003). According to the Saratoga Institute (2003), other important HR metrics include HR staff per employee, HR cost per employee, time to fill a position, and cost per new hire. In 2000, the average HR full-time equivalent ratio, a ratio that measures the number of full-time employees per HR person, was 90:1 (Davidson 2003). Although this ratio varies by industry and over time, it speaks to the importance of human resources in deriving enterprise value and the need for SMEs to revisit some of the trade-offs between labor intensity and capital intensity, inasmuch as SMEs consider their employees to be as either costs or assets (Gering 2003).

By way of example, a "firm's $100 cash flow had a market value of $2,000, while [its] largest competitor's $100 cash flow had a market value of $4,000" (Becker et al. 2001: 5). The difference in valuation was a result of the efficiencies that the rival firm had created from strategic management of HR. When the suggestion was made to evaluate the lower valued firm's HR to help increase its market value, that firm's executive expressed his lack of concern for HR functions and measurements, stating that his system was cost effective and did not need to be measured. As it turned out, his firm was subsequently acquired by its rival! Proactive measures to help SME executives understand "the connection between investments in HR architecture and shareholder value," might have produced a different outcome (Becker et al. 2001: 6).

To optimize the value of a firm's HR assets and reduce the associated costs, Saratoga Institute (2003) has developed guidelines for return on investment (ROI) analysis. These

include: (1) identifying all of the direct and indirect costs associated with HR programs, processes, and activities; (2) assessing quantifiable results; and (3) using those results in the analysis (Davidson 2003). SMEs appear to have potentially high stakes with regards to the effects of an HR strategy on enterprise value, as valuations are used for purposes of obtaining bank loans, investment capital, sale or exit planning, or even tax planning for succession in family-owned and/or family-run firms (Welbourne and Cyr 1999a).

Based on the above review of the literature on HR in SMEs, there are several gaps in our understanding of strategic HR functions and choices for SMEs. As SMEs deserve a clear understanding of how and to what extent they need to make an HR strategy part and parcel of an overarching business strategy, we now turn to the proposed decision-making model.

HR Decision Model for Small and Medium-Sized Enterprises

Once a SME hires employee number one, an HR strategy is born, either as part of planned strategy or as an emergent, unintended consequence of growth. To create an effective HR management system, SME owners and managers must have a clear understanding of the future needs of their business and how "a complex set of complementary HR practices" will fit into the overall structure (Ulrich 1997; Klass 2003: 43). Table 1 illustrates six options for SMEs to use in developing an HR support strategy. The following sections describe each option in more detail, including the benefits and limitations.

Option I. No Change

As with any decision-making process, there is always the option to maintain status quo. Having no formal HR support or strategy is typical of a small business with a very small employee base, perhaps one or two employees, or no employees. Once a company begins to build an employee base, even without a formal HR support strategy, administrative functions such as payroll, worker's compensation insurance, and training, even if informal, are necessary. These functions are the responsibility of the businessowner or manager when there is no other HR support.

Creating and implementing a support program where none exists does require some initial finances, and the main benefit for not utilizing a formal HR support strategy is that there is no additional financial outlay. This is often appealing to very small businesses that are conserving cash and monitoring their investments closely. For many small businessowners, keeping all aspects of the business in their control is also attractive when the business is in its start-up or initial growth phase.

Despite what appears to be a low to no-cost strategy, the time that the businessowner or manager spends focusing on the administrative side of HR is very expensive and detrimental to the business strategy. To quantify this, a businessowner needs to take his/her own hourly wage into consideration. If the businessowner were his/her own employee, making that salary, would it be efficient to use his/her time on administrative functions? Typically the answer is no, because implementing the business plan is much more critical than the administration. For the businessowner/manager, running the business is the only efficient use of time; administrative tasks are essentially busy work.

If a business is to carry the liability of employing a workforce, worker's compensation insurance is a legal necessity. Keeping premiums low is a function of quality safety training as part of an overall training program. When there is no HR support, businessowners/managers have to spend significant amounts of time training employees themselves. Even when a skilled workforce is employed, there is still an adjustment or orientation phase that employees experience. Without support, employees may experience decreased enthusiasm and increased frustration during this phase. It is much more difficult, therefore, for overtaxed businessowners to focus on employee satisfaction and retention without some form of HR strategy.

The biggest liability for a business with no HR strategy is the possibility of illegal actions, whether they are intentional, and lawsuits. As illustrated by the existing HR literature, businessowners/managers do not typically have the training, knowledge, or experience to know how to appropriately administer HR. Most employers know that it is not legal to hire an employee in the United States without either legal residency status or proper worker's permit documentation. However, employers may not know how to appropriately ask for this information, how to conduct a background screening, what kinds of questions are appropriate and legal to ask in an interview setting, or how to negotiate employment contracts and salaries. All of these questions require some degree of expertise in labor laws and HR administration.

Option II. Staff Assume HR Work

The second option, staff assume HR work, entails expecting other employees to take on HR responsibilities. This can be a risky strategy. It is rare that employees who lack HR training and experience will be able to effectively execute even the most basic HR tasks such as recruiting, hiring, training, and payroll (Wager and Langrock 2003b). Town Grocery, one particular firm with more than 350 employees implemented this strategy by asking the general manager, who has no formal HR training, to train individual administrative employees to take on various HR responsibilities. One employee in the finance department is responsible for payroll, another employee whose main job function is to oversee the inventory tracking process, is now also responsible for the initial hir-

ing paperwork for all new hires. New employees who are "register trained," go through a three-day training process run by department supervisors. There is no training program for other employees, who essentially learn their job functions by trial and error. Because this firm promotes from within, even managers lack adequate training in core competencies such as buying and merchandising. Most of their skills are learned from working with distributors and by monitoring department sales to determine if the current merchandising strategy is successful (Ghassemieh 2004a).

Table 1. Pros and Cons of HR Options for Small and Medium-Sized Enterprises

Option	*Descriptor*	*Recent Research*	*Primary Benefits*	*Major Limitations*
I No change	○ Implement no formal HR support or strategy	Gelade and Ivery (2003) Mathis (2003) Shutan (2003)	No investment required Maintains owner/manager's control over all aspects of the business	Owner/manager handles all HR functions Potential legal ramifications Reduced morale
II Staff assume HR duties	○ Expect other employees to take on HR responsibilities. ○ Tasks fragmented and delegated to management or lower level employees	Becker et al. (2001) Davidson (2003) Wager and Langrock (2003a) Klass et al. (2002)	Limited financial outlay required Career-building potential via staff cross-training Reward opportunity for growth and development	Lack of adequate HR training Distracts managers from focus on business strategy Unclear "point-person" for grievances
III Hire HR Manager and Build Function	○ Hire a professional HR Manager (i.e., who has HR certification or an MBA degree)	Becker et al. (2001) Lee (2002) Fitz-Enz and Davidson (2002) Davidson (2003)	Highly trained expert is on management team Gives SMEs a competitive edge Includes HR in strategy decision-making Can prevent mistakes that have financial and legal consequences Frees-up time for top-level managers to run business	Expensive Difficult to find highly qualified professionals who want to work in firms with <100 employees
IV Hire HR consultant	○ Hire a temporary HR consultant ○ Can be on an as-needed basis	McGarvey (1999) Wager and Langrock (2003a)	Can limit amount of responsibility given to consultant, retaining SME control Neutral third party to consult for employee relations' advice Can hire on a temporary or as-needed basis Can prevent mistakes that lead to financial and legal ramifications Having a person dedicated to employee retention and satisfaction frees up time for top-level managers to run business	Full liability remains SME responsibility Selecting a consultant that fits the needs of the SME. Potentially costly
V Outsource HR to PEO	○ An HR service firm, such as a PEO, will take on full gamut of responsibility and liability for hiring, training, firing, as well as other employee issues	Neal (2000) Lee (2002)	PEOs economies of scale in negotiating benefits packages with major carriers PEO will take on full liability and responsibility With some vendors, can choose which functions to outsource	Need to spend time researching the best vendor for SME's industry & company needs[1] Give up all employee responsibilities to SME If vendor goes out of business, difficult to regain employee information May interfere with internal relationship of HR and Mgt/EEs
VI Electronic HR (eHR)	○ Provides eHR support for functions (e.g., online training, benefits self-management) ○ Can be used in conjunction with other HR options to create a complete package	Friesen (2003) Greengard (2003) Hammers (2003) Cohen (2004)	Minimizes administrative functions Allows employees to be in control of their own benefits selections Managers free to focus on other priorities When used in conjunction with HR consultant, frees consultant to focus on employee relations Online traceable training Retains employee records	SMEs still liable Employees need to have some expertise in benefits enrollment No live person to access when all of HR is electronic Employees can get bored with online training tools Can be costly to implement and administer

1. For a link to a downloadable sample page PEO contract, visit Applied Staffing Solutions' website at: http://www.appstaff.com/employers_employee-Leasing.php.

Asking employees to take on specific HR tasks is a low-cost strategy that is very appealing to SMEs. Offering employees the opportunity to take on additional challenges can be rewarding for the employees, and can allow for employee growth and development. If SMEs provide proper training for these tasks, it is possible that employees can successfully implement aspects of administrative HR functions.

Although asking existing employees to take on various HR responsibilities requires almost no additional financial outlay, there are some clear drawbacks to this strategy. Fragmenting HR tasks creates confusion among employees. When employees are not sure of who to talk to when there is a grievance, they turn to top managers who are often out of touch with day-to-day departmental functions (Wager and Langrock 2003a; Becker et al., 2001). As a result, top managers' time is taken away from focusing on core business strategies and decisions. (Davidson 2003; Klass et al. 2002; Becker et al. 2001). Instead, managers are spending a significant amount of time handling employee concerns ranging from payroll mistakes to scheduling conflicts, as seen at Town Grocery. Furthermore, deficiencies in HR knowledge, in particular legal compliance, could lead to costly mistakes.

Overall, asking employees who have no formal HR training to take on HRM tasks is not the safest option; however, there are some measures that SMEs can take to protect themselves. Providing training is the most obvious and easiest way to support employees who are taking on HR responsibilities in addition to their regular duties. Investing in HR workshops or classes that will help employees to understand the compliance issues related to the functions they are now responsible for is a wise choice, and can help prevent costly mistakes. Giving employees access to the resources that will help them make better hiring decisions, helping them understand simple tasks, such as document retention schedules, and creating a communication structure for employee questions and concerns, will also save time for SME managers as well as help to develop a stronger team.

Option III. Hire HR Manager

Hiring a full-time HR professional can be very expensive for a small business with limited resources (Lee 2002). Annual salaries for HR professionals range from $50,000 to $104,000 a year (Saratoga Institute 2003). Typically, HR professionals have formal training and specialization in the HR sector. Most have HR certification or master's degrees, either a general Human Resources degree, or with a particular emphasis such as employee training. Many HR professionals have master's degrees in business administration (Anonymous 2004). Because of these credentials, professionals serve as strong strategic business partners and tend to be included in top-level management decisions (Davidson 2003; Becker et al., 2001).

As HR functions become more and more important to a company's overall strategy and sustainable competitive advantage, employing full-time HR professionals will give SMEs a strategic edge for competing with large and small competitors (Fitz-Enz and Davidson 2002; Davidson 2003; Becker et al., 2001). Moreover, HR professionals come to the business with the training, knowledge, and expertise that will help SMEs avoid common HR mistakes. Lawsuits and high-cost worker's compensation claims can be prevented by including such expertise as part of the management team. Another advantage is having someone in house to handle employee incentive programs, such as employee recognition, team-building activities, and other activities that benefit employee satisfaction (Gelade and Ivery 2003; Mathis 2003; Shutan 2003).

According to the Saratoga Institute (2003), the industry standard for HR professionals is between one full-time HR employee per 90 to 100 employees. For small businesses with fewer than 100 employees, hiring a full-time HR professional is difficult to justify, given the high cost. However, SMEs with 100 employees or more will benefit from the expertise, training, and strategic partnership of having an HR professional on staff.

Option IV. Hire HR Consultant

It is difficult to tap into information on HR consulting without talking to a consultant or being affiliated with a consulting firm. However, SMEs can research different consulting firms to determine what types of services are offered and the associated costs. An online search of various HR firms servicing SMEs shows that, in general, HR consultants advise clients on specific problems or needs, such as worker's compensation claims, sexual harassment suits, and specific employee issues or situations.

For example, one particular insurance company in Northern California, with 45 employees is dealing with some difficult employee relations decisions. Until recently, the firm decided that HR administrative functions would be the responsibility of its office manager, while a temporary HR consultant would handle training and HR compliance on a once-a-year basis. However, as the firm's operations have grown, its office manager has become overburdened, and because of some of the employee-related situations, it was inappropriate for her to be involved with handling these grievances. As a result, an HR consultant was asked to come in once a week to handle employee grievances, mitigate discipline issues, act as an advisor in worker's compensation claims, handle compliance issues, and help maintain employee satisfaction. The consulting fee is $100 an hour, which does not include the cost of transportation, paperwork, or

any other additional charges. HR consultant costs vary between companies, and depend heavily on the types of services an SME needs (Ghassemieh 2004b).

Hiring an HR consultant has the benefit of having access to a live person who is an expert in handling HR issues. Consultants have easy access to legal information, compliance laws, and other HR resources that are costly to set up (Ghassemieh 2004b). There is the added benefit of having a third-party person who is not directly affiliated with the internal business to handle employee issues, such as chronic tardiness or absenteeism, interpersonal conflicts, performance appraisals, worker's compensation claims, sexual harassment claims, and employee satisfaction. Furthermore, SME managers and businessowners retain control and responsibility of their organization's structure and HR operations, such as hiring, firing, and benefits, while having access to a professional for more complex issues that require further training and experience.

Some of the limitations of hiring an HR consultant include retaining full employee liability. Unlike outsourcing HR (Option V), HR consulting firms do not take on any legal responsibility for lawsuits or compliance failures that may arise. They work strictly in an advisory role, and tend to include liability disclaimers in their hiring contracts. Although having an HR consultant available to employees and managers allows for human contact, it takes time and training for consultants to familiarize themselves with the operations and organization of the businesses for which they consult (Wager and Langrock 2003b). Depending on the consultant and the firm, the costs may be too high for some SMEs who do not have adequate finances.

Option V. Outsource HR

The HR outsourcing industry, which services small and large businesses, was projected to grow to a $37.7 billion industry by 2002 (Lee 2002). According to Gartner Inc., a research and advisory firm, the outsourcing industry has a 9.5 percent growth rate and was actually at $110 billion in 2002, with a $173 billion projection for 2007 (Gartner Inc. 2003). Because the industry is growing so rapidly, types of vendors and their offerings are changing as well. Most outsourcing vendors provide solutions for recruitment, compensation planning, stock options administration, training, payroll, employee benefits, and risk management.

Professional Employer Organizations (PEO) is the most widely used form of outsourcing today. Notable PEO firms include Administaff, CheckPoint HR, Tri State PEO, and ADP Total. The PEO option is attractive because vendors take on the liability associated with carrying employees. Essentially, PEO vendors become co-employers with their clients because they assume responsibility for hiring, firing, and employee salaries. It is important for SMEs to fully research a PEO before signing a contract because not all PEOs take on the same level of legal responsibility or liability (BuyerZone.com 2002). Understanding the differences between vendors and the needs of the business are key factors in the decision to outsource. The cost of using an outsourcing vendor will vary by vendor and industry, but in general, "the client pays the PEO the actual cost of wages and benefits plus an administrative fee of between 2 and 6 percent of payroll to cover the cost of the HR services" (Klass 2003: 44; Hirschman 1997).

There are many benefits for SMEs who contract with PEOs, including the advantage of economies of scale. Many SMEs do not offer desirable benefits packages to employees because of the associated costs. However, a PEO hires and manages employees for many clients giving PEOs the kind of bargaining advantage that most small businesses do not have (Klass 2003). By virtue of having large numbers of employees, PEOs can negotiate benefits packages with HMOs, PPOs, and other benefits providers, which are similar to the kinds of packages that large companies are able to offer. This advantage is desirable for SMEs as well as their employees. Another substantial benefit to employers is the time savings that come from not having to research federal and state employment laws. Since PEOs are responsible for compliance in hiring and firing practices, small businessowners and managers are free from the stress, cost, and time associated with following up with and measuring internal HR compliance (Lee 2002).

Although the benefits of outsourcing are desirable, SMEs must carefully research vendors before deciding to hand over employee information. The cost and time to set up the SME-PEO relationship varies by industry and by vendor; however, there are several factors affecting the establishment of the SME-PEO relationship that heavily influence cost and time. Some of the important factors include trust in the SME-PEO relationship, clear and open communication channels between the SME and PEO, tenure of PEO representatives, and SME management's understanding of PEO services prior to contracting. Trusting a PEO is critical since SMEs are placing confidential and sensitive data in their care. What happens if a PEO goes out of business? Will the SME have access to its own employee information? Questions such as these must be addressed when devising a contract so that SMEs can protect themselves against losses.

Option VI. Electronic HR

The use of electronic HR (eHR) is a growing trend for large corporations. eHR was introduced 10 years ago, first as a software package that was installed on each employee's computer (Cohen 2004). The initial system promised high value, but was somewhat disappointing as it was viewed as a "glorified [benefits] enrollment form" (Cohen 2004: 27). Since that time, eHR has expanded to include benefits, payroll systems,

tracking of employee records, vacation time, and gainsharing plans. These interactive tools have advanced so much that many eHR systems are simple enough that IT does not have to be involved in web administration (Greengard 2003). Because of advancements in eHR technology, it is becoming more affordable for SMEs to use this option as well.

Similar to outsourcing, eHR is beneficial because firms can delegate administrative and technical functions to the eHR system, thereby reducing some of their HR costs. Employees are becoming more Internet savvy, and workplace culture has evolved to expect Internet skills (Greengard 2003). SME managers and owners no longer have to be involved in employee benefits selections or payroll tasks with eHR tools. Also, training is greatly simplified and easier to track with online training functionality. Employees can manage their own training through online instruction modules that can teach employees in a virtual business environment. The benefit to SMEs is the ability to monitor employee training through online test scores and employee files that are stored on the system.

One limitation argued by some consultants is that eHR systems are merging internal and external recruiting environments, making it more difficult for employers to limit recruitment and promotion opportunities to internal employees (Friesen 2003). This is a benefit to employers who are looking for a larger pool from which to select employees; however, employers who have a policy that only allows promotion from within will have a more difficult time (Friesen 2003). Similar to fully outsourcing HR, solely using eHR requires employees to have computer literacy, while limiting their access to HR as there is no one-on-one personal interaction. Although eHR is becoming more cost effective, in some cases it can cost millions to implement a full eHR initiative with multiple licensing and applications (Hammers 2003). eHR also requires that employees become experts in benefits options, causing SME managers and owners to also become experts in order to answer questions and offer guidance. In addition there are some training limitations as employees often have difficulty maintaining interest in ongoing online instructional modules (Ghassemieh 2004b).

Implications for Researchers and Practitioners

Small businesses around the globe are looking for experts and resources that can direct, advise, and offer guidance in implementing HR support for their employees (Kok and Uhlaner 2001; Jackson 2002). Owners and managers of SMEs lack training and experience in HR-related functions. Although prior researchers have examined some of the HR options available to SMEs, no one resource has been created to include a matrix of the entire range of HR options. As

Table 2. HR Decision-Making Matrix for Small and Medium-Sized Enterprises

Option	*Considerations*				
	Hiring and Recruitment	*Training*	*Benefits and Compensation*	*HR Metrics and Enterprise Value*	*Estimated Cost Factor*
I No change	No impact on strategy	None	No impact	Potentially negative impact	Low
II Staff assume HR	No impact on strategy	Limited, some cross-training of existing staff	Potential advancement for existing staff	Potentially negative impact	Low
III Hire HR Manager and Build Function	Makes HR part of strategy	Limited cost-effectiveness for firms with <100 employees	Favorable impact	Potentially favorable impact	High
IV Hire HR consultant	Makes HR part of strategy	Limited cost-effectiveness for firms with <100 employees	Favorable impact	Potentially favorable impact	Moderate to high
V Outsource HR to PEO	Makes HR part of strategy	Cost-effective	Favorable impact	Potentially favorable impact	Moderate to high
VI Electronic HR (eHR)	No impact on strategy	Limited cost-effectiveness for firms with <100 employees	Unknown impact	Unknown impact	Moderate to high

depicted in Table 2, the proposed HR decision-making matrix model can help SMEs choose an HR strategy option and find a configuration that is most supportive of their situations or stages of growth.

Application of the HR Decision Matrix Model

The HR decision matrix model is helpful to SMEs in selecting an HR strategy that will best fit their overall business strategy and size of organization. Though not applicable in every situation, for most businesses with less than 100 employees, Option 1: No Change or Option II: Staff Assume HR Duties are most appropriate. In both of these options, the owner and general management will continue to make the hiring and recruitment decisions, so there is no impact on business strategy. For training, with Option 1, informal on-the-job training will be provided, but with Option II, internal staff will take on some of the training duties, including cross-training of existing staff. Regarding compensation and benefits, with Option 1, there is no impact on existing business strategy, but Option II could provide potential advancement for existing staff who assume HR responsibilities. Unfortunately, with both of these options there is a potentially negative impact on the overall HR metrics and enterprise value—especially if the owner and general management spend too much time caught up in the administrative portions of HR. Conversely, they could spend too little time on HR issues and find they are not in compliance with local or federal labor law issues. The upside of both Options I and II for businesses with less than 100 employees is that the cost factor is quite low.

A caveat to the above recommendation is that in SMEs with less than 100 employees that operate in industries where litigation is rampant, a safer solution would be Option IV: Hire HR Consultant—but perhaps on a limited basis to keep costs low. The HR consultant could provide the legal counsel needed, but would not burden the small company with the overhead of a full-time HR professional.

For businesses with more than 100 employees, the two most obvious solutions are Option III: Hire HR Manager or Option V: Outsource HR to PEO. The selection of the most appropriate option depends, in most part, on the culture of the organization and the philosophy of the management team. Outsourcing of HR to a PEO relieves the management team of much of the stress of HR administrative functions, but also distances management from certain employee relation issues. For fast-paced, more formal environments, this may be a good choice. However, for SMEs which pride themselves on creating a family environment in which management knows a lot about each employee and wants to promote a more cohesive, team-oriented environment, the investment in a full-time HR professional may be the best choice. This will not only be a safeguard for legal issues, but will also send a message to employees that HR is valued, because the function is part of the company family. It may also be more satisfying for employees to have a "real person" on site with whom they can speak face-to-face, rather than telephoning an outside firm for HR support.

For larger firms, both Options III and V do make HR part of the business strategy for recruiting and hiring, and can have a favorable impact on training, compensation, benefits, HR metrics, and enterprise value (See Table 2). The downside is the moderate to high cost factor for implementation.

As SMEs grow in size, reaching the 1,000 employee mark, this might signal a good time to investigate Option VI: Electronic HR—but not as a solo solution. eHR works well in combination with both Options IV and V, and over the long run can save a lot of time by providing answers to common employee HR questions online. This option, however, generally does not make financial sense for a company with fewer than 100 employees, as the systems require an initial capital outlay for implementation.

Finally, it is quite feasible for a larger SME with 1,000 or more employees to use a combination of the six HR options, as it progresses in its organizational development and size. For example, when the firm was smaller, with less than 100 employees, it may have elected to use Option II: Staff Assume HR Role. However, as it grew in employee size, it may have elected to hire a full-time HR Manager (Option III). Later it may have added an eHR system (Option VI), and outsourced payroll and benefits to a PEO (Option V). On occasion, it may elect to bring in an HR consultant (Option IV) to assist with training or other HR issues on an as-needed basis.

Limitations and Areas for Further Exploration

SMEs who elect to implement HR support should continue to rely on an HR professional to help select an option that meets a particular set of needs and contributes to sustainable competitive advantage. In that vein, managers and owners of SMEs will need to conduct further research (i.e., which vendor to choose, what kind of eHR software is appropriate, which consultant or professional to hire). Future academic research is also needed to show the costs and benefits of adopting one option over another, and under what conditions one or more options is likely to lead to increased enterprise value. Since the HR decision matrix model is presented here as a conceptual model, further empirical tests are warranted. Conducting in-depth structured interviews after the HR decision matrix model has been used to make HR support decisions would help to test the utility of the model. Finally, there appear to be opportunities to document HR practices in SMEs in developing nations that may or may not have ready access to the consulting, outsourcing, and eHR options presented in the model.

Endnote

[1] Town Grocery's name has been disguised at management's request.

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Collecting Oral Histories for Entrepreneurship Research

Brian McKenzie

Oral history collections can offer a wealth of detailed information for entrepreneurship researchers. The stories that entrepreneurs tell provide researchers with insight into both perspective and into substantive issues of entrepreneurial behavior.

The life stories of entrepreneurs offer students of entrepreneurship insight into both the explicit and the tacit knowledge of working entrepreneurs.

Ethnography has been described as the inscription of social discourse (Geertz 1973, p.19) and is a tool of the qualitative research technique of participant-observation (Emerson et al. 1995, p.1). Oral history collection is a form of ethnography particularly suited to the study of entrepreneurship. The popular press is full of the biographies and histories of successful entrepreneurs (Barton 1998; Berlin 2005; Frolick 1999; Gates and Hemingway 1999; Kaplan 2000; Rothchild 1991 to name a few). The field of business management has a long history of utilizing storytelling in the form of case studies as a pedagogical tool (Alvarez and Merchan 1992, p.29) and more recently has begun to utilize case studies in research (Chetty 1996; Eisenhardt 1989; Kanter 1983). As a scholarly tool, oral history is an accurate collection of subjective evidence (Moss 1974, p.11) created by the *memoirist* (Moss and Mazikana 1986, p.25) in dialogue with the interviewer. Oral history documents contain the self-created life stories of memoirists. The life stories that entrepreneurs tell represent their attempts to make sense of the events of their past.

Alex Stewart has suggested that ethnography is well suited to the study of entrepreneurship and that participant observation holds the promise of allowing scholars a unique glimpse of entrepreneurship's crucial lore (Stewart 1991, pp. 77–78). Murray Low and Ian MacMillan indicated the need for more contextual and process oriented research in the field of entrepreneurship (Low and MacMillan 1988, p.156). Howard Aldrich and Ted Baker claim ethnographic methods may allow researchers to gain new insight from their field observations (Aldrich and Baker 1997, p.393). If new and promising research is to be conducted in the domain of entrepreneurship, it follows that fieldwork is one promising avenue that must be considered. Stewart has advanced the use of anthropological theory for the development of entrepreneurship research, saying: "Few business school scholars are trained in anthropology, but it is possible for them to borrow bundles of concepts from anthropology" (Stewart 2003, p.11).

Oral history interview collections can have many uses in entrepreneurship research. Steinar Kvale suggests two broad metaphors of the role of the researcher: as a miner and as a traveler (Kvale 1996). The researcher as miner seeks to unearth valuable material; the researcher as traveler hears and reports what he has heard. Oral history can be utilized by both of these metaphorical researchers in the field of entrepreneurship research. Researchers who use oral history collection to unearth valuable material can undertake theoretical studies, such as the author's dissertation (McKenzie 2003), or inquiries into the tacit knowledge of entrepreneurs, such as Chris Steyaert's investigation of the development of local knowledge of entrepreneurship (Steyaert 1995). Researchers who use oral history collection as a form of travel tend to undertake ethnographic studies such as David Boje's study of organization formation through the use of storytelling in an office supply firm (Boje 1991).

Ethnography in general, and the analysis of oral narrative in particular hold promise as being well suited to the study of entrepreneurship The balance of this article lays out methodological arguments designed to assist researchers in the use of oral history collection as a tool for research in entrepreneurship.

Oral History Collection as a Research Tool

Oral history collection is both a very old phenomenon and a very new one. David Henige traces the origins of oral history collection to Homer's 800 B.C. account of the fall of Troy (Henige 1982, p.7). Contemporary oral history collection is credited to Allan Nevins, who established the Columbia University "Great Man" recording project in 1948 (Evans 1987, p.34; Lummis 1987, p.17; Nevins 1996, p.33; Thompson 1988, p.58). While earlier collections had been undertaken by Lawrence Reddick and the Federal Writers Project (Starr 1996, p. 43), it was the development of portable tape recorders that led to acceptance of oral histories as a source of historical material and then to the recognition of oral histories as valuable data in their own right (Rosenberg 1978, p. xiv).

Oral history evidence, which is referred to as an *actuality* (Ridington 2001, p.1), has been defined as "…an account of firsthand experience recalled retrospectively, communicated to an interviewer for historical purposes and preserved on a system of reproducible sound" (Lummis 1987, p.27). As a scholarly tool, oral history interviews are an accurate collection of subjective evidence (Moss 1974, p.11) created by

memoirists in dialogue with the interviewer (Moss and Mazikana 1986, p.25). The actuality, or audio recording, documents the lived-in experience of the data collection and requires little, if any, added detail to transmit the verisimilitude of the text.

Clifford Geertz has identified two problems associated with ethnographic research. The first problem he describes as the issue of being there (Geertz 1988, p.8). The ethnographic researcher is expected to produce a convincing amount of cultural detail to persuade the reader of the verisimilitude of his or her text. However, the researcher is also expected to preserve his or her objectivity, clearly distinguishing between being there and being separated from the phenomenon and thus objective (Goodenough 1970, pp.98–112). The second problem identified by Geertz (Geertz 1988, p.17) is the discourse problem: What is the work that the author authors? Roland Barthes tackles this issue by looking at the levels at which a text can be authored: as a constituent of a genre, as a device for understanding, as a determination of reality, or as a collection of the words of others (Barthes 1989, pp.56–64). Edward Bruner suggests all ethnographies are guided by implicit narrative structures (Bruner 1986, p.139) and consequently must be seen as merged subjective/objective interpretations of the dominant narrative structure of the time (Bruner 1986, pp.149–150). This article suggests that oral history is a particular form of ethnography that is well suited to resolving these important issues.

Much of the problem, described by Geertz as the issue of being there, is removed from the ethnographic process by the use of oral history evidence. The actuality provides an objective recording of the sounds of the time and place of the conversation between the memoirist and the interviewer. The richness of this conversation is preserved in the recording including the full vocal range of the memoirist and the subtle background audio environment or *soundscape* (Truax 1984, p.9) and thus represents a faithful document (Ridington 2001; Thompson 1988 p.108).

The discourse problem, identified by Geertz, is also reduced through the use of oral history evidence. It is important to recognize that the actuality represents discourse between its two authors: the interviewer and the memoirist. Life stories are derived from the perceptions of individuals (Thompson 1988, p.150), modified by their interpretation of these perceptions (Grele and Terkel 1985, p.133) after a period of reflection (Friedlander 1998, pp.314–318) and are presented in a form of narrative determined to be suited to the listener (Kopijin 1998, p.145). Whether oral histories are factual is not the central consideration. What is important is the “thick description” (Geertz 1973, p.6) of the memoirist’s understanding of their entrepreneurial experience: their contemporary consciousness (Lummis 1987, p.133). In this light, the factors of lapsed time and modified perceptions increase the memoirist’s understanding of the phenomenon in which he or she has participated (Hoopes 1979, p.47) and thus adds to the thickness of the description.

Two factors make life stories unique. First, life stories are not contemporaneous accounts of events; rather they represent the memoirist’s attempt to recount events, as these events were perceived to have happened (Watson and Watson-Franke 1985, p.3). Thus, the story is not an account of events as they happened, but rather an attempt by the memoirist to make sense of his or her relationship to past events, often communicated in the form of a series of anecdotes centered on past events (Allen and Montell 1981, pp.28–29). Second, life histories are not self-initiated, but rather are discourses between the interviewer and the memoirist (Thompson 1988, p.199) and then between the actuality and the interpreter of the actuality (Dudley 1998, p.165). While the primary role of the interviewer is to act as a sounding board for the memoirist (Evans 1987, pp.26–27), an important secondary role for the interviewer is to act as the mediator who draws societal meaning out of the memoirist’s internalized perception of events (Mintz 1996 pp.302–303). Thus, the memoirist claims authorship of his or her life history and the interviewer claims authorship of what Edward Bruner describes as “the three tellings of fieldwork” (Bruner 1986, p.147). The first of these tellings is the direction of the memoirist’s recollection by telling what information the interviewer is seeking. The second telling is the part the interviewer plays in the creation of the actuality: both as a listener and as a questioner. The third telling is the summary and analysis the interviewer creates for the audience of his or her scholarly work.

The temporal and authorial flexibility of life histories make the medium well suited to the understanding of entrepreneurship (Phillips 1995). The process of new venture creation often does not conform to linear progression (Hansen and Bird 1997) and entrepreneurs often have to balance their perceptions of present and future (Eisenhardt and Brown 1998; Fischer et al. 1997). Similarly, the founding of a new venture is often shared by a network of founding figures (Aldrich and Zimmer 1986; Weinstein 1999). Joint authorship of organizational life histories help entrepreneurs to explain events without explicit agreement on criteria (Aldrich and Fiol 1994, p.652), develop a cohesive vision for action (Alvarez and Merchan 1992, p.40) and build organizational hegemony (Boje et al. 1999, p.358).

Oral History Data

Selecting Memoirists

Storytelling plays a vital role in the founding and building of a business (O'Connor 2002, p.39), and often reveals intimate details of both the venture’s and the entrepreneur’s life in a form that evokes the empathy of the listener (Steyaert and Bouwen 1997, p.47). The following transcription of a brief

excerpt from an actuality exemplifies the intimate details that can be revealed in entrepreneur's oral histories:

> *It took me 15 years to build a company up to $30 million or $25 million or whatever it was and four days for it to crumble. And…uh…I moved to start again, and decided I would go into business again and I moved to Portland, Oregon, and did a consulting business and so forth; came up with this concept called Convergent Media Network, and I thought this was where the Internet was going to go and this is what's going to happen there; but I really didn't have any energy to do anything to be honest…and in…This may be more than you want to know about my personal life. On Thanksgiving in November my wife told me that she wanted me to leave and I found myself out without a family; without a business and the only thing that happened was that Christmas I got my kids and they have lived with me ever since* (Vasko and McKenzie 2002).

The researcher who wants to employ oral history collection for entrepreneurship research must begin by building personal relationships with each of the entrepreneurs he or she wishes to interview.These personal relationships must be strong enough to warrant the trust as a confidant.To do this, the researcher must make his or her way into each entrepreneur's social network. An entrepreneur's social network can be modeled as a series of outwardly expanding rings of intimacy (Adler 1985, p.64) as shown in Figure 1.

The arrow in Figure 1 shows the researcher's starting position as a member of society at large.The arrow points out that the path toward a position of trust as a confidant means building personal relationships with advisors, mentors, or directors of the company or with the entrepreneur's friends or members of his or her organization. Many different personal relationships can be used to build a path toward a position of trust with the memoirists, including the interviewing friends or friends of friends, the receipt of introductions to entrepreneurs from trusted advisors or through networking agencies and meetings with entrepreneurs through social affinity.

Different research projects will require different selection criteria for memoirists. Some researchers will want to develop intensive interviews of particular industry or social networks. An example of this kind of research is shown in Mina Yoo's qualitative interviews with immigrant and native-born Americans operating in high-technology industries in Silicon Valley (Yoo 2004). Other researchers might take a more open approach in an attempt to develop a theoretical or random sample. Dorothy and David Counts took such an approach in their ethnographic fieldwork exploring the values of seniors who live in recreational vehicles (Counts and Counts 2001). Whichever approach is taken, researchers will find that oral histories provide a rich and relatively bias-free source of unstructured data.

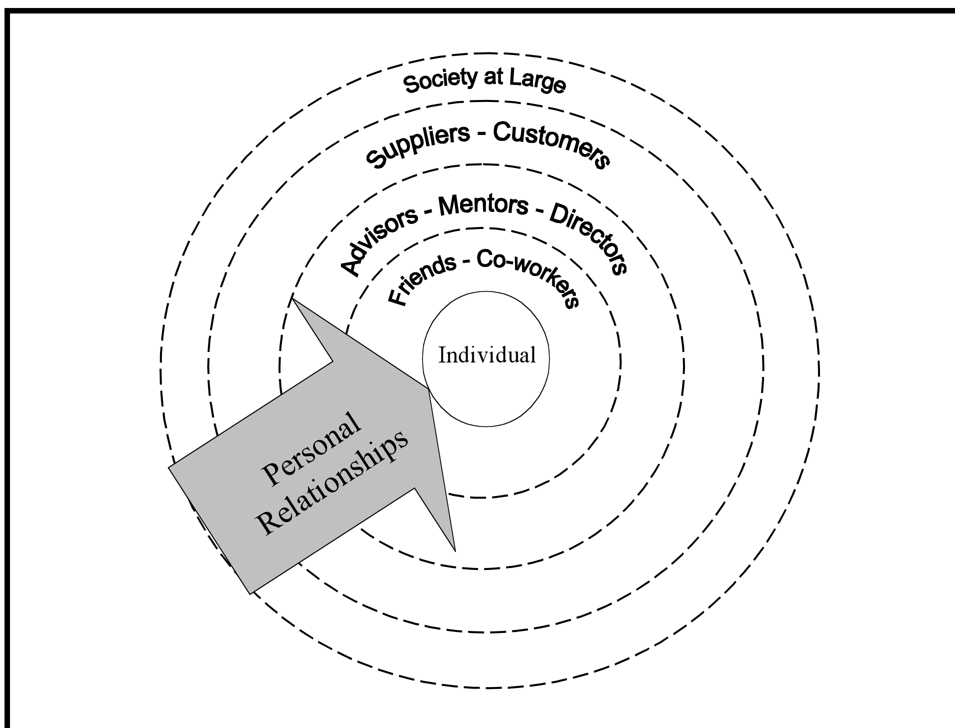

Figure 1. Model of an Entrepreneur's Social Network

Data Quality

Within positivistic research, data quality is usually measured in terms of *validity* and *reliability.* In interpretive research such as ethnographic studies, data quality relies on the relationship between the researcher and his or her audience (Goldenberg 1992, p.111). Validity, within positivistic research, is defined as a measurement of the accuracy of information and its generalizability (Creswell 1994, p.158). In qualitative research, the construct of validity is generalized to truthfulness of investigation (Kvale 1995, p.25). Reliability, within positivistic research, has been defined as a measurement of the likelihood of similar conditions giving rise to similar observations (Aunger 1995, p.99). In qualitative research, the construct of reliability is generalized to craftsmanship on the part of the researcher. Craftsmanship in research embraces rigorous techniques of research design, data collection, inter-

pretation of data, and communication of results (Mays and Pope 1995, p.110).

Validity can be broken down into two constructs: *internal validity,* which concerns the accuracy of information and *external validity,* which concerns the generalizability of findings. The construct of internal validity in positivist science corresponds to veracity or the degree of correspondence with objective (Kvale 1995, p.23). Postmodern philosophy of science disputes the notion of objective reality (Feyerabend 1975, pp.81-92) and substitutes "spirit of truth" (Ricoeur 1965, pp.189-190) as the measurement of veracity. Veracity can be tested by comparing the events described in the actuality for conformity with printed records (Allen and Montell 1981, p.85). The construct of external validity in positivist science corresponds to generalizability and is generally treated as a sampling issue in interpretive inquiry (Zikmund 1994, p.259). Sheldon Goldberg has argued that the external validity of a study is a combination of the techniques used in establishing a representative sampling and the negotiation between the researcher and the audience of the limits of the generalizability of the findings of the study (Goldenberg 1992, pp.97–98).

Evidentiary reliability is an evaluation of the internal consistency of the memoirist's narrative (Lummis 1987, p.83). While remembering that it is the sense-making of the memoirist's relationship to past that is being recorded, each actuality can be tested for reliability by ensuring the story has coherence, consistence, and is free of contradictions (Fisher 1985 p.364). Reliability in the interpretation of actualities can be much more difficult to establish. Care should be taken in the documentation and the referencing of the interpretation process to ensure that a clear trail of the researcher's work has been left. The design of the documentation of this trail is laid out in the following discussion of protocols suggested for oral history collection.

Protocols for Oral History Collection

The protocols outlined in this section are intended to ensure the authenticity of data collection and replication. In all cases, the actuality recorded with the memoirist is to be considered the document of reference. Current best practices in oral history collection suggest that transcriptions only be made of sections referred to in the documentation and interpretation of the interviews. These transcriptions must be made accurately and without editing grammar or syntax (Davis et al. 1977, p.48–49).

Authorship

In all cases, the interviewer is considered the primary author of the interview, while the memoirist is considered the author of his or her actual words (Thompson 1988, p.224). Copyright for the recording is held by the interviewer, retaining the rights to publish the recording for the first time, to reproduce the recording in any material form, to rent it out, and to authorize any such acts (U.S. Government, 2002, Chapter 2, Section 201). However, any royalties received from the recording should be split equally between the interviewer and the memoirist of that recording (U.S. Government, 2002, Chapter 10 Subchapter C, Section 1007).

Recording

The current standard device used in oral history recording is the mini-disc portable recorder coupled with a one point stereo microphone. However, technological development of portable recording devices is providing oral history researchers with increasingly sophisticated field equipment. The primary concern of researchers in evaluating field equipment should be recording quality. The microphone and recorder should be capable of accurately capturing frequencies between 100 and 15,000 hertz. Secondary concerns for the evaluation of recording equipment include field ruggedness, ease of use, size, and storage capacity. Researchers should also consider the compatibility of their field equipment with standard desktop and laptop hardware and software. Video recording equipment offers a paradox to the oral historian. While the capture of image and sound should afford increased realism of the memoirist's interview, production difficulties associated with video tend to create a distraction from the easy flow of conversation. Each researcher will have to determine the costs and benefits of video capture as a part of his or her style of interviewing.

Documentation

An oral note of the date, location, and memoirist recorded in each session should be made at the beginning of each recording disc. If the session extended beyond the length of a single disc, subsequent discs should be labeled as soon after the session as is feasible.

Immediately after each session, it is good practice to activate the play-only tab on the mini-disc to protect the disc from erasure. As soon after the interview as feasible, a master original should be copied from the actuality and an outline created. A complimentary copy can be made from the master original and sent to the memoirist along with a letter of thanks. The original recording should then be placed in a safety deposit box and the master original should be placed in a fireproof storage box. The medium, storage, and access restrictions of each copy of the interviews collected have been summarized in Table 1.

It is good practice to create an outline of each recording as a text document, which contains a summary of the memoirist's conversation. The outlines can be kept as a separate

Table 1. Summary of Storage and Access to Recordings

Description	*Medium*	*Storage*	*Access*
Original recording	Sony MDW74D recordable magneto-optical disc	Safety deposit box	Principal researcher only to create master original
Master original	HHB brand CDR 74 gold or silver recordable compact disc	Locked fireproof box in different location from original recording	Principal researcher only to create working copies
Working copy (number)	Generic CDR 74 recordable compact disc	Locked filing cabinet at principal researcher's work station	Principal researcher and others with specific permission
Complimentary copy	Generic CDR 74 recordable compact disc	Delivered to memoirist	Memoirist
MP3 Copy	Generic CDR 74 recordable compact disc	Locked filing cabinet at principal researcher's work station and computer hard drive	General

document filed with the memoirist's first and last names. These outlines should contain a summary of the conversation at each two-minute mark in time (Hitch and Norris 1988, p.26; McCracken et al. 1974, p.11). General information, including the memoirist's contact information can be stored in a recording catalog. This catalog can be created using database software in a format designed to be compatible with standard archival document retrievals system standards (Langlois 1976, p.24).

A separate physical file should be kept for each interview. This file can contain copies of correspondence between the interviewer and memoirist, the signed Participant Consent form, a paper copy of the recording outline and a working copy of the interview, as well as any previous or subsequent documentation of the memoirist and his or her ventures. These files should be kept in a locked cabinet at the principal researcher's workstation. A working copy of the recording catalog should be stored on the principal researcher's computer; a backup copy kept in the locked fireproof box with the master original recordings.

Transcription

A transcription is a text version of what has been said (Taylor 2001, p.36). Paul Thompson has pointed out that transcription is a literary form requiring interpretation of the grammar and phrasing of an oral document (Thompson 1988, pp.229–232). Accurate transcription takes between six and eight hours of work for each hour of interview (Ritchie 2003, p.65). In many history collections, the actuality recorded with the memoirist is considered the document of reference (Atkinson 1998, p.54). There is no necessity, therefore for researchers to attempt the difficult and time-consuming and costly task of transcribing interviews in their entirety. The outline of each recording can act as a reference to direct the researcher to specific parts of the interview.

Transcription of entire interviews served as a ready means of data transfer when print was the primary form of communication in the academic community. However, recent developments in electronic technology have allowed scholars to accurately and inexpensively transfer audio documents via the Internet and lightweight compact discs. Interestingly, dif-

ferent cultures regard different media as the primary research tool. Canadian oral historians have adopted "aural history" (Langlois 1976, p.24) and thus regard the sound archive as the document of reference. American researchers tend to treat the transcript as the primary research tool (Ritchie 2003, p.87). Differing disciplines tend to have differing bias toward the use of audio or text as the primary research tool (Yow 1994, p.227). It would appear that, since business management is primarily a culture that has a strong preference for verbal communication (Mintzberg 1971, p.39) it would be appropriate for management researchers to use audio recordings as their primary research tool.

Audio documents contain more data than written transcriptions. Thompson summarizes the case for audio documents in this way:

> *…the recording is a far more reliable and accurate account of an encounter than a purely written record. All the exact words used are there as they were spoken' and added to them are social clues, the nuances of uncertainty, humor or pretence as well as the texture of dialect* (Thompson 1988, p.108).

Seal and Silverman have demonstrated how incomplete transcription can obscure the researcher's full understanding of a conversation (Seale and Silverman 1997). The flatness of transcription compared to the richness of audio can be imagined by the reader of the following of a piece of an interview:

> *And I finally said to the guy we were dealing with, "If you think for one moment, that I'm going to let you have the source code; I said you're nuts. I will tear this company down. I will fold this company before I will ever, ever give you the source code. I will fight this in court to my last breath. Don't mess with me on this one." And that was the last guy...and they dropped it* (Stephens & McKenzie, 2002).

Missing from the transcription is the power of the voice of this female entrepreneur as she recounts one of the most important battles of her career. The reader cannot build into the reading of this transcription the memoirist's sense of frustration and determination. However, the audio recording captures her emotion in the tonality and phrasing of her words. A summary of the relative benefits of oral recording and text transcriptions as primary research document is provided in Table 2.

Transcription of portions of recorded interviews is a necessary part of interpretation. When capturing the text of portions of an interview for inclusion in an article, the researcher may find transcription software an asset. Express Scribe Transcription Playback Software (ExpressScribe 2002) produced by NCH Swift Sound is an excellent freeware aid to accurate transcription. Express Scribe Transcription Playback Software allows the transcriber to slow down the playback of recordings to an appropriate speed for accurate transcription. The software uses the function keys of a standard computer keyboard to control the playback of a recording. This facilitates the transcriber's ability to stop, rewind, and manipulate the speed of the recording without having to remove his or her fingers from the keyboard.

Table 2. Comparison of Audio Recording and Text Transcription

	Audio Recording	*Text Transcription*
Authenticity	Fidelity of the sound of original conversation	Mediated reproduction of text of original conversation
Cost	Relatively low cost, quick	High cost, time-consuming
Data richness	Reproduction of words, grammar, phrasing, tonality, and soundscape of original conversation	Interpretation of words and grammar of original conversation
Distribution	Audio files via Internet or audio compact disc	Text files via Internet or printed paper
Ease of Analysis	Two-step process utilizing outline and audio recording	Analysis can be performed directly from digital or paper text

Editing
Accuracy is the central goal of editing oral history recordings (Wilmsen 2001, p.65). The accuracy of the actuality can be diminished through poor recording quality, misstatement by the memoirist, or misrepresentation of the discourse of the interview process. Any decisions to edit an interview should be made only after discussion with the memoirist or when the memoirist specifically has asked that comments made during an interview be kept off the record. Damaged or excess compact discs should be destroyed according to current best practices: placing each disc to be destroyed on a nonmetallic stand in a microwave oven and subjecting it to 15 seconds of high temperature radiation (Ardant 2000).

Preservation and Archiving
Security of data can best be ensured through a strategy of distributed storage. This strategy is based on data being stored in multiple media formats in multiple locations. As soon as possible after the recording session, the data should be transferred to an archival compact disc. It is suggested that audio editor software such as Goldwave Digital Audio Editor software (Goldwave Inc. 2003) be used to convert the signal to WAVE format in 16 bit stereo mode at a sampling rate of 44100 hertz. The resulting file should be recorded on an HHB brand Compact Disc Recordable (CDR) 74 gold or silver recordable compact disc using compact disc creation software such as Roxio Easy CD Creator software (Roxio 2004). HHB CDR 74 gold or silver recordable compact discs have archival stability estimated to be in excess of 100 years. This disc will act as the "master original." Two other compact disc copies should also be made at this time, using any available brand of CDR disc. These discs will act as the "working copy," and the "complimentary copy." A second working copy of each interview can be created from the master original in MP3 format using software such as Thompson MP3PRO Player/Encoder (Thompson 2004). Encoding interviews into MP3 format allowed all data collected to be stored on one compact disc and on the hard drives of multiple computers to further distribute the data.

All labels must be of archival quality to prevent diminishment of the archival stability of the compact disc. The original recordings should be used only in the creation of the master originals (Langlois 1974, p.28). All master originals should be stored together in a locked fireproof box (UL rating 350-1/2hr) kept in an environment with a low, constant temperature (8 C – 18 C) and constant humidity (40%) (Linstead 2001). The master originals are intended for use only in the creation of the working copies.

Ethical Considerations
The cardinal principle of research ethics is respect for human dignity (Medical Research Council et al. 1998, i.5). The spoken word is open to interpretation (Borland 1996), which can lead to harm of the interview participants. While no more information is expected from the research subjects than what he or she would reveal in the normal course of everyday life, some memoirists may make libelous, slanderous, or defamatory remarks during their interviews, as they would be in the normal course of their everyday life (Moss 1974, p.15). Prior to each recording, the interviewer should inform the interviewee of his or her responsibility in terms of libelous, slanderous, or defamatory material. At all times during the interview, the importance of gaining understanding of the process of entrepreneurship must be balanced against the potential for harm.

The memoirists who participate in oral history studies can reasonably expect minimal risk of harm resulting from their participation. Minimum risk of harm is defined as:

> *…the probability and magnitude of possible harms implied by participation in the research project will be no greater than those encountered by the subject in those aspects of his or her everyday life that relate to the research* (Medical Research Council et al. 1998, 1.5).

All subjects participating in oral history interviews must do so with free and informed consent. Prior to each interview, the researcher should review and have the memoirist approve a Participant Consent form. While the particulars of such a form will be negotiated with the Human Subjects Research Ethics Committee at the researcher's institution, the following topics are suggested as guidelines:

1. Contact information for the researcher and for the researcher's institution should be given.
2. The nature of the research and if possible specific research questions should be generally explained.
3. Each participant should be informed that he or she can withdraw from the research project at any time without any consequences or any explanation.
4. It should be explained to each participant that he or she will receive a complimentary compact disc copy of the actuality produced with him or her. Each memoirist should be asked to review this complimentary copy to ensure that there was no material that he or she feels should be kept "off the record."
5. If there is controversial material in the recording, the researcher should agree in advance that he or she will edit the offending material.
6. Copyright and royalty splitting should be clearly stated.
7. The memoirist should consent to the donation of the recording to a recognized oral history program. This donation should be granted on a standard Tape Release form used by that institution. In every case, each participant should be asked to sign a copy of the Participant Consent form and the Tape Release form before the

interview process begins. Questions from any participant about the research project should be dealt with openly and honestly prior to his or her commitment to participate. A sample Participant Consent form is presented in Figure 2. This Participant Consent form has been accepted by the Human Subjects Research Ethics Committees at two universities.

You are being invited to participate in a study entitled _______ that is being conducted by (Researcher name). (Researcher name) is a/n (Researcher title) at (Researcher institution) and you may contact him/her if you have further questions by phoning (Researcher phone number) or by e-mail: (Researcher e-mail).

The purpose of this research project is (Specify research goals)

Research of this type is important because (Specify importance). It is hoped this research project will contribute to the field of entrepreneurship research by (specify contribution). The collection of oral histories of entrepreneurs is intended to become an ongoing source of information for entrepreneurship researchers.

You are being asked to participate in this study because you have been identified as an entrepreneur through published description, receipt of nomination/award for entrepreneurial achievement or credible third party reference.

If you agree to voluntarily participate in this research, your participation will include being asked to tell your life history.

The potential benefits of your participation in this research include having your life story recorded and receiving a copy of this recording. Society will benefit from this unique collection of oral histories, since oral history collections have become an important source of historical and cultural data. It is expected that this particular collection of oral histories will contribute significantly to the knowledge of entrepreneurial decision-making and communication.

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be destroyed.

This research may lead to a commercial product or service. The nature of this commercial use is publication of the study, which may include publication of part of the recording of your entire interview. I will hold copyright for the recording and will retain the rights to publish the recording for the first time, to reproduce the recording in any material form, to rent it out, and to authorize any such acts. You will have the right to use the recording for your own purposes. Any royalties received from a particular interview will be split equally between the principal researcher and the interviewee in accordance with the US Copyright Law.

Since you are being asked to record your oral history, any quotations or your remarks will be attributed to you, and no effort will be made to protect your anonymity in this study. The oral history that you are being asked to provide will be a public document. You will be given a copy of the interview for review. Any material, which you deem might be harmful, will be deleted from the original recording, and a revised recording will be made. Otherwise, no attempt will be made to provide confidentiality of the information that you have recorded.

The data collected in this study is intended to form the basis for a public collection of oral histories. It is likely that these oral histories may be used in subsequent research. When this particular research project is complete, the recordings will be donated to a suitable recording library.

I am anticipating that the results of this study will be shared with others through presentation at scholarly meetings. It is also possible that the results may be published in articles or books.

In addition to being able to contact the researcher at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting (Name and phone number of contact at Institutional Review Board).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researcher.

________________	________________	__________
Name of Participant	*Signature*	*Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Figure 2. Example of Participant Consent Form

Summary

Oral history collection promises a new source of high-quality data for entrepreneurship study. This article has shown that the employment of a simple set of protocols can lead to the gathering of data describing entrepreneurs' work experience.

Oral history collection can be used as fieldwork projects for students of entrepreneurship. Student oral history projects, such as the Foxfire Project (Wigginton 1998), have shown how the experience of oral history collection can lead to the transfer of tacit knowledge. Jeffry Timmons suggests directed interviews of entrepreneurs as an integral part of his entrepreneurship curriculum (Timmons 1999). Instructors can utilize information from oral history collection to add the excitement and interest of the field to classroom discussion. Audio clips of the experiences of working entrepreneurs can dramatize and engage student interest in theoretical concepts.

Oral history collection shows promise of providing a wealth of detailed information for entrepreneurship researchers. The stories that entrepreneurs tell provide researchers with insight into both perspective and into substantive issues of entrepreneurial behavior.

The life stories of entrepreneurs offer students of entrepreneurship insight into both the explicit and the tacit knowledge of working entrepreneurs. This article has outlined the importance of this field knowledge to the study of entrepreneurship. Adoption of the protocols laid out in this research can lead both educators and researchers toward a valuable new source of high-quality data.

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Entrepreneurship as Expectations Management

Steven E. Phelan

Entrepreneurial profits flow from differences in expectations between buyers and sellers regarding the future value of resources. This article investigates whether differences in expectations can be influenced by an entrepreneur to produce greater profits. It is argued that there are several points in the entrepreneurial process where such interventions can occur and that the use of these techniques should be associated with superior wealth creation. The article also explores the ethical implications of influencing stakeholders in this way.

It is no secret in Silicon Valley that Messrs. Gates, Allen, and Ballmer of Microsoft owe their fortunes to a brilliant ruse. Back in 1980, they managed to convince IBM to purchase an operating system from Microsoft that would allegedly run on IBM's soon-to-be-released personal computer. Sadly, at the time, Microsoft did not own such an operating system, nor was the company capable of developing one in the required timeframe. Instead, Microsoft proceeded to acquire the rights to a suitable operating system from Seattle Computer Systems (SCS) for the paltry sum of $50,000, no doubt by keeping the identity of the ultimate customer tightly concealed. The PBS documentary, *Triumph of the Nerds,* described it as "…the deal of the century if not the millennium…it was certainly the deal that made Bill Gates and Paul Allen multibillionaires."

While Microsoft's success will continue to inspire entrepreneurial ambitions well into the 21st century, it is debatable whether the dominant explanation for wealth generation in strategic management, namely the resource-based perspective (Wernerfelt 1984; Barney 1991), is capable of capturing the nuances of Gates' strategy. Microsoft obviously possessed unique information and negotiation skills that IBM and SCS did not. Nevertheless, it was the way Microsoft shaped and molded the expectations of IBM and SCS that was the salient feature in the case.

Since the publication of Barney's (1986) seminal article on strategic factor markets, strategists have been aware of the important role played by expectations in profit generation. Paradoxically, while they have acknowledged the importance of expectations, strategists have given scant attention to how expectations may be strategically manipulated to extract greater profits. Few people would dispute the influence of advertisers, politicians, the media, and other "spin doctors" in shaping public opinion, attitudes, and behavior, yet the ability to shape expectations is also of fundamental importance to entrepreneurs. If we believe that expectations can be molded, manipulated, and manufactured, then the formal study of expectations management may provide fertile ground for understanding, and prescribing strategies for, entrepreneurial wealth creation.

The first section of this article examines the role of expectations in wealth creation. The second section defines expectation management, while the third section introduces a model of resource management, which makes the links to expectations management explicit and identifies targets for managerial action. In the fourth part of the article, strategies for managing expectations are considered, drawing on various theories culled from economics, psychology, and sociology. The article concludes with a consideration of the implications of expectations management for theory and practice and examines the scope for future research.

Expectations and Wealth Creation

For several decades, economists in the Austrian tradition have argued that (entrepreneurial) profits arise from differences in expectations between buyers and sellers (Schumpeter 1934; Hayek 1945; Kirzner 1973). However, an appreciation of the role of expectations in generating entrepreneurial profits only began to filter into strategic management in the early 1980s, primarily through the writings of economists such as Rumelt (1987), Teece (1986) and Nelson and Winter (1982). Ultimately, it was through the work of Barney (1986) that the relationship between expectations and profit found its clearest expression in the strategy literature.

According to Barney (1986), the value of resource ownership must be offset against the cost of acquiring that resource in a "strategic factor market." Resources become more valuable when they are rare and difficult to copy or acquire. However, in a perfectly competitive market the owner of a resource will be fully aware of the value of the resource and will ensure that the cost of acquiring the resource will exactly equal the value created by shifting the resource to its new use (or user). This is true even if the resource is to be used in combination with other resources. As long as the original owner of the resource can accurately assess its future value, she will stand to appropriate all gains from its future deployment.

There are only two situations where this will not be the case: information asymmetry and windfalls. In both cases, the seller fails to correctly anticipate the future value of a resource. In the case of information asymmetry, the buyer possesses

information that the seller does not. This information allows the buyer to form a different expectation about the future value of the resource than the seller. If the buyer's information is accurate, the buyer will make a profit on the transaction, a profit referred to as an entrepreneurial profit by Rumelt (1987). Of course, this raises the question of why the seller was not able to acquire the same information as the buyer. One possibility is that the entrepreneur had greater insight or alertness to profit opportunities than the seller (Kirzner 1973).

The second case of "strategic factor market" failure occurs when neither the buyer, nor the seller, correctly anticipates the future value of a resource. In this case, the value of the resource changes favorably *after* the buyer acquires it. This is known as a "windfall profit" in economics. By definition, windfall profits cannot be planned (although windfall events can often have a profound influence on the future strategic development of a company as witnessed by Microsoft's unexpected opportunity to sell an operating system to IBM).

Barney's (1986) ideas have been challenged by Dierickx and Cool (1989), who have argued that certain resources, such as culture and reputation, cannot be traded in "strategic factor markets". Instead, these nontradable assets accumulate over time and cannot be alienated from the firm (although they may be transferred when the entire firm is bought or sold). Strategic management, in Dierickx and Cool's opinion, involves both growing nontradable assets *and* acquiring resources in strategic factors markets.

Barney (1989) has countered by arguing that nontradable resources, such as cultures and reputations, are metaresources that arise from the interactions between factors in the firm over time. In a perfect market, the cost of these resources in the strategic factor market would *include* the future value to be derived from the creation of metaresources, such as reputation. If not, either the firm had better information about the future value of a reputation when assembling the resources, or the value of the resource bundle was unappreciated by any of the parties when it was assembled.

If neither party appreciated the future value of the firm's reputation, then the resulting gain is clearly a windfall profit. However, it does not diminish the need for management to manage the "windfall resources" that arise from a windfall event. In fact, the ability to recombine resources in response to opportunities arising from windfall situations is itself an entrepreneurial act and the resultant profits may be considered a form of derivative entrepreneurial profit (i.e., derived from the windfall event). Thus, through a succession of windfall events, the value of a firm's portfolio of resources may grow over time, creating new opportunities for wealth generation. The ability of management to place these resources into new, more profitable, uses may itself become a key capability of successful organizations.

Consequently, as organizations grow, they become less dependent on strategic factor markets and more focused on managing internal resources. Paradoxically, this has the effect of giving an organization more bargaining power in strategic factor markets (Rajan and Zingales 1998). As discussed below, the ability to respond appropriately to shifts in bargaining power is itself a facet of expectations management.

The Role of Expectations in the Entrepreneurial Process

Much of the literature in entrepreneurship has focused on creativity or opportunity identification as the defining element in the entrepreneurial process (Shane and Venkataraman 2000). While the identification and decision to exploit an opportunity to create value are both necessary parts of the entrepreneurial process, they are *not* sufficient to generate wealth for the entrepreneur (Casson 1982). It is also necessary for the entrepreneur to acquire control over the relevant resources before any profits can be realized—a fact often overlooked in many entrepreneurship textbooks. Moreover, the discussion of expectations in the previous section indicates that the entrepreneur must acquire these rights for less than their future value to realize a profit.

Defining Expectations Management

Mintzberg (1987) once defined strategy as "…any pattern in a stream of decisions, whether intended or not." Similarly, expectations management may be conceived as *any attempt to change opinions about the value of a resource, whether intended or not.* This definition touches on several issues. First, the value of a resource is equal to the sum of the expected discounted cash flows to be derived from the resource over its life. Depending on the resource, this value may be capitalized in a single payment or paid periodically in the form of rent, wages, or interest. For instance, consider a world without inflation, risk, depreciation, time value of money, or exogenous shocks to supply or demand conditions. In this world, a factor owner would be indifferent to 10 payments of $1,000 or one payment of $10,000. In the first case, we would say that the resource is being rented, in the latter, that we are purchasing the resource. The purchase price (or capitalized value) is thus equal to the sum of the future rental cash flows.

In reality, the future is uncertain and therefore different economic agents will form different opinions about the future value of a resource. Each agent must form expectations about factors, such as the inflation, risk, time value of money, demand, and supply conditions, for various resource combinations. A divergence of opinion creates the possibility for entrepreneurial profit (or loss). Expectations management seeks to affect these opinions in a way that is favorable (i.e., more profitable) for the entrepreneur.

The definition is silent on *who* is managing expectations. When acquiring resources, a buyer would like to manage expectations down to a lower value whereas a seller would like to raise expectations. At various stages in an organization's life cycle, an entrepreneur will be both a buyer and seller of resources. As such, expectations management is similar to a negotiation, where two parties are attempting to discover a "zone of agreement" between two reservation prices. In the language of negotiation, expectations management attempts to shift perceptions of reservation prices. However, expectations management is more than negotiation. It is also about creating a climate in which stakeholders renegotiate agreements less frequently (usually because they are satisfied with existing arrangements). Notwithstanding the Microsoft DOS purchase, resource negotiations are not usually one-shot deals. Most entrepreneurs will face an ongoing attempt to manage the expectations of their stakeholders, particularly employees, customers, investors, and suppliers.

Finally, the definition recognizes that some managers and entrepreneurs may unconsciously be managing expectations and may actually deny that they have attempted to manipulate opinions and perceptions. As intent is difficult to measure, the definition focuses on outcomes; that is, whether there is evidence that expectations (and hence values) were changed as a result of an intervention. Often, the behavior may have to be inferred by comparing resource values (prices, capital values, wages, interest, rent) with companies that were not as successful in managing expectations. For instance, from its inception, Apple Computer positioned itself as the antithesis of IBM. IBM was the blue-suited corporate behemoth while Apple was the small, informal, hip, and user-friendly backyard start-up. Apple's advertising proclaimed it as "the computer for the rest of us." Both employees and customers at Apple were almost evangelical in their praise and endorsement of the machine. The result was that Apple was able to attract a premium price from customers and hire (and motivate) some of the best programmers and designers in the computer industry (Carlton 1997). Clearly, Apple's strategy generated enormous profits for the company during the 1980s, and the return of Steve Jobs in the late 1990s has apparently reignited the company's culture and profits. But, is it expectations management? Jobs would probably argue that he did not intentionally seek to manipulate the expectations of his staff to acquire their talent at submarket rates; that they voluntarily put in the extra effort in response to his vision. However, many entrepreneurs have cultivated the talent to motivate people to volunteer resources from an early age. They may have come to associate this talent with positive labels such as leader, innovator, or visionary rather than derogatory terms, such as manipulator.

The Entrepreneurial Process

To effectively control a resource, an entrepreneur needs to acquire at least three rights (Barzel 1989):

1. the right to obtain income from the resource;
2. the right to direct the resource to different uses; and
3. the right to alienate, sell or otherwise dispose of the resource.

This suggests that an entrepreneurial process focused on resource management (Stevenson, Roberts, and Grousbeck 1989) can be linked to the management of expectations (see Figure 1). Every stage in the process is associated with a critical management task and a set of expectations to be managed. Each stage, in turn, is discussed below.

Identify

The process begins with the identification of new, potentially profitable, resource combinations. Following Schumpeter (1934), this may involve the introduction of a new good; the

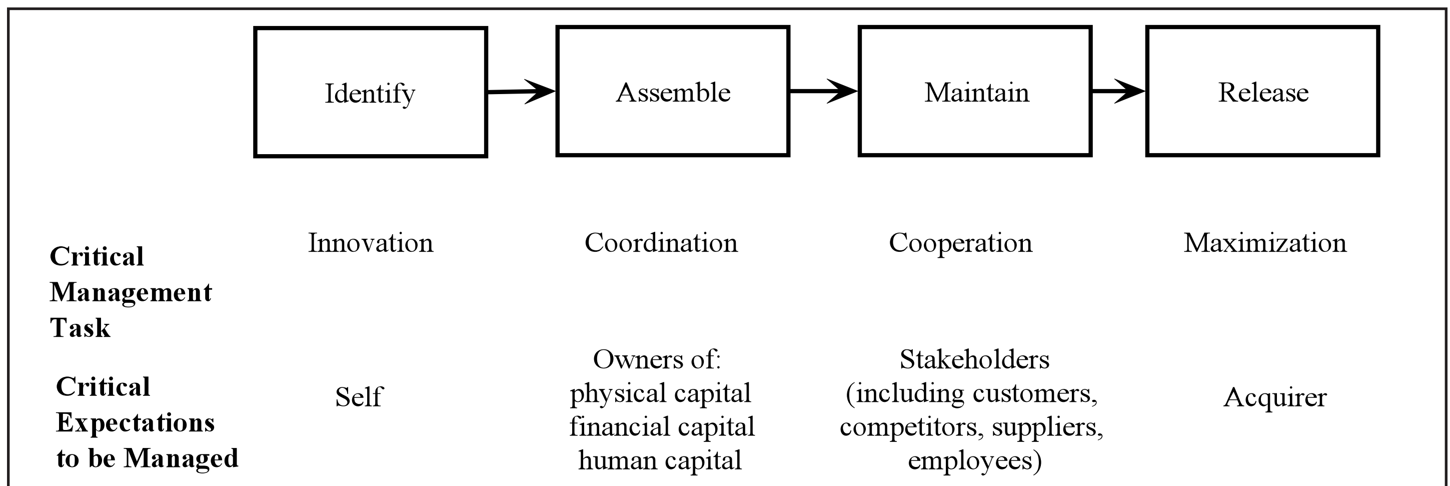

Figure 1. An Entrepreneurial Process Based on Resource Management

improvement of an existing good; the improvement of a production process; the opening of a new market; or the creation of a new organization. The key point is that the entrepreneur must somehow discern that the value of a resource bundle in some future use will exceed its value today.

The critical management task in the identification stage is creating a (creative) innovation. Creativity is "…the enabling process by which something new comes in existence" (Brazeal and Herbert 1999:39). The same authors define an innovation as the improvement in a product or process either through *creativity or imitation* (Brazeal and Herbert 1999). In their view, entrepreneurship is a creative act that leads to an innovation. Imitation, because it reduces, rather than increases, risk is not an entrepreneurial act. Thus, entrepreneurship must always involve creative innovation.

This is consistent with Schumpeter's (1934) view of the entrepreneur as the agent in society carrying out new, or novel, combinations and with Knight's (1921) view of the entrepreneur as the bearer of uncertainty.

During this stage, entrepreneurs must constantly struggle to manage their own expectations. The entrepreneur forms expectations about the future and, because of the inherent uncertainty involved in forecasting the future, there is always a danger that the expectations may be wrong.

As such, the single greatest threat facing an entrepreneur is that she may acquire resources that may be less valuable than originally thought. In particular, the entrepreneur may fall victim to the winner's curse; that is, the future value of the resources proves to be less than the initial outlay (Bazerman and Sameulson 1983). There is growing evidence that entrepreneurs are likely to have inflated expectations about the future (McGrath 1999). Research indicates that entrepreneurs are overconfident and prone to overgeneralize from a few characteristics or observations (Busenitz and Barney 1997). Entrepreneurs are also likely to perceive situations as less risky than others (Busenitz 1999). Arguably, the first battle entrepreneurs may have to fight is with themselves.

Assemble

Once the entrepreneur has identified a profit opportunity, she must assemble the appropriate resources to realize their hidden (at least to others) value. The ability to appropriate this future value is the essence of entrepreneurship (Stevenson et al. 1989). While some authors have chosen to label the establishment of a new organization as the "entrepreneurial event" (Gartner 1985), it is clear that the timeframe from value identification to value realization is indeterminate—ranging from seconds in financial markets to decades in industries such as pharmaceuticals and biotechnology.

The process of assembling resources is complicated by the need to shield the information about their future value from competitors and factor owners (Casson 1982). Obviously, if competitors become aware of the profit opportunity, then there is an incentive from them to preempt the entrepreneur and enter the market early. Moreover, the presence of multiple buyers in the strategic factor markets will tend to raise the price of the inputs, perhaps eroding the entire entrepreneurial profit in the process.

Even in the absence of competition, factor owners will still adjust their prices upwards if they suspect surplus value is being created. This is the primary reason that stocks trade at a premium following takeover announcements—existing stockholders surmise that a takeover would not be occurring unless the acquiring firm expected to improve the value of the acquired firm's resources. In fact, the evidence suggests that stockholders in acquired firms successfully manage to appropriate most of the value from a merger or acquisition (Datta, Pinches, and Narayanan 1992).

The entrepreneur has several avenues for obtaining control over required resources. These include: *bootstrapping,* or building on an existing stock of resources; engaging in *financial exchange,* including purchasing or renting a resource; and *social exchange,* where the right to use a resource is obtained through nonfiduciary means.

Bootstrapping, probably the most common form of resource acquisition, involves creating new resources from those already controlled by the entrepreneur. This includes using the family home as an office, using an employer's facilities for photocopying and computing, and using the family car to visit clients. The family home is often used as collateral to raise the financial capital needed to acquire other assets.

Entrepreneurs often find it difficult to attract capital through financial exchange because of the risk of failure, default risk, and difficulty in communicating information about the venture (Birley and Norburn 1985). Start-up firms suffer from a "liability of newness" and a "liability of size" that makes them much more likely to fail than established enterprises (Hudson and McArthur 1994). Lenders, creditors, investors, suppliers, skilled workers (and even customers) are therefore likely to either avoid a new venture or charge a premium for their services.

New firms also suffer from a lack of reputation, credibility, and creditworthiness (Larson 1992). Given higher credit default rates for new ventures, providers simply do not know whether a given firm will meet its commitments. This is particularly true whenever capital is being rented, as is always the case with human capital, where rent occurs in the form of wages. It is also common to rent property, equipment, and inventory, particularly when the entrepreneur lacks the financing to buy these items outright. The increased default risk ensures that the entrepreneur will pay a higher price for these services (if they can be obtained at all).

Finally, entrepreneurs often find it difficult to communicate information about their opportunity to capital providers. Entrepreneurs must be careful not to release too much information because there is always the risk that the idea might be appropriated by factor owners (Teece 1986). In addition, ideas that are too radical might not be understood or believed by factor owners making them reluctant to commit their capital (Langlois and Robertson 1995).

The difficulty in establishing beneficial financial exchanges increases the importance of social exchanges in realizing potential opportunities (Larson 1992; Larson and Starr 1993; Hudson and McArthur 1994; Honig 1998). Personal reputation, for instance, may compensate for lack of firm reputation. Family or social networks may open up sources of capital, or create moral obligations, to supply resources at a reasonable price or extend credit on favorable terms. Trust is also easier to establish when a social bond is present (Lewicki, McAllister, and Bies 1998).

The ability to manage expectations is thus a critical aspect of the resource assembly phase. Clearly, the entrepreneur must change the characterization of the venture from disreputable, risky, and prone to failure to something more positive. All other things being equal, the negative perception of a new venture will ensure that the entrepreneur will pay a higher price to access resources than an established company. This places the entrepreneur at a competitive disadvantage and constrains the amount of profit that can be realized from an opportunity. These perceptions may even render otherwise profitable opportunities unprofitable. Any tactics that can increase the bargaining power of entrepreneurs would clearly be useful. We will consider several of these tactics in the next section.

The entrepreneur must also become adept at establishing social exchanges that will facilitate her own financial interests. The work of Maslow (1943) and others remind us that people have a wide variety of needs, only some of which are financial. Obviously, some of the difficulties in negotiating financial exchanges can be overcome if the entrepreneur can fulfill (or create an expectation that they will fulfill) some of these nonfiduciary needs in (full or partial) exchange for financial support.

Of course, once all the relevant resources have been acquired, the entrepreneur still has the challenging task of assembling and coordinating the resources under her control to actually realize the identified profit opportunity.

Maintain

Once the resources have been assembled and coordinated, they must be used to create an ongoing stream of products for sale and consumption. Resources must be maintained during this period of operation and there may be many threats to the value of the entity during this period.

Physical assets, for example, will suffer wear and tear and will need to be repaired or replaced. This is unproblematic if the asset is available in a competitive market but, if the asset is highly specialized to a particular task, there is a risk of holdup, where the factor owner appropriates some of the value-added (Williamson 1975, 1985). In fact, any resource that is being rented, or periodically acquired, on a factor market represents a potential holdup threat. While Williamson recommends acquiring ownership of specialized assets to avoid holdup, this is frequently impractical (for instance, mall retailers lack the financial capital to buy a shopping mall) or impossible (human capital cannot be owned). The ability to manage the claims and expectations of factor owners over time (including employees, suppliers, and creditors) will thus be critical for maximizing profit over the long run.

While holdup by factor owners is the most significant risk to profit diminution, it is by no means the only risk that organizations face. Organizations also face attacks on their value from a range of stakeholders, including customers, unions, governments, and the general community (Freeman 1984). Customers consistently seek lower prices, unions higher wages, governments more taxes and costly regulations, and the community more consideration. In turn, organizations invest in functions to manage the expectations of these groups: marketing, public relations, investor relations, and corporate affairs. The activities of these parts of the organization also fall legitimately within the study of expectations management particularly if they are aimed at preserving the value of the firm and minimizing the value claims and expectations of other groups.

The initial resource configuration assembled by the entrepreneur will need constant adjustment to respond to new opportunities and threats as they arise in the environment (Penrose 1959; Teece, Pisano, and Shuen 1997). Necessary adjustments include: adding new resources, placing existing resources in new uses and configurations, and forming alliances with complementary resource owners (Sanchez and Heene 1997).

While the venture remains small, the entrepreneur may be able to personally monitor environmental trends and developments. However, as the organization grows, opportunity identification must be delegated to subordinates (Greiner 1972). The total quality management (TQM) movement has always argued that employees should be involved in resource allocation decisions regardless of the size of the organization (Tonnessen and Gjefsen 1999). The power of delegated decision-making is also supported by recent work in complexity theory that finds that local optimization often outperforms global, top-down, management in complex environments (Stacey 1993; Kauffman, Macready, and Dickinson 1994; Kauffman 1995).

A high level of trust within an organization encourages information exchange about opportunities; enhances organizational learning; and encourages risk taking and intrapreneurial behavior (Chung and Gibbons 1997). Conversely, a failure to garner cooperation from employees, to provide adequate incentives for innovative behavior, and to induce a "volunteer mindset" has the potential to lead to a suboptimal allocation of resources. This, in turn, makes the organization vulnerable to the "discipline of the market" including bankruptcy and takeover.

Release

Eventually, the entrepreneur will reach a point where resources must be released from the organization, either because of incremental changes in the environment (e.g., an economic downturn) or a more definitive change (e.g., an initial public offering or liquidation).

In an incremental scenario, resources that are rented (e.g., labor, property, and equipment) are usually easier to release from the organization than resources that are owned outright. In the process, however, the entrepreneur must be careful not to damage any existing stock of goodwill that might exist toward the organization (from customers, employees, or suppliers). Downsizing that is handled poorly may jeopardize the chance to acquire resources on favorable terms later on. Thus, the entrepreneur must be careful to manage the perceptions of the organization among stakeholder groups.

Seeking to dispose of assets (i.e., resources that are owned or created) changes the role of the entrepreneur from capital acquirer to capital provider. In this role, the entrepreneur attempts to maximize the apparent utility of the assets by working on the expectations of the acquirers. The entrepreneur knows that highly specialized assets will be difficult to sell (Williamson 1985) and that the value of an asset will be limited by the extent of the market (Smith 1776). Thus, whenever possible, the entrepreneur would like to convey the impression that (1) the assets can be deployed in a wide range of uses, (2) there is substantial interest from others in buying the assets, and (3) the potential value of the assets in alternative uses is high.

Discussion

The preceding discussion on the process of resource management has identified several target areas for the entrepreneur to manage expectations (see Table 1). Arguably, this list demonstrates that managing expectations is not a peripheral activity—it is absolutely essential to the realization of any entrepreneurial profit.

In one reading of the resource-based view (RBV), the ability to manage expectations is yet another organizational resource that is valuable, rare and difficult to copy (Barney, 1991). The same may also be said of an entrepreneur's negotiation skills or talent for impression management. Recently, however, theorists have attempted to move beyond the tautological nature of the RBV to explore the processes by which resources are accumulated (Sanchez and Heene 1997; Teece et al. 1997) and their value appropriated (Coff 1999). The current research adds to our knowledge by specifying the key role played by various forms of expectations management in the process of wealth generation.

Several other areas may also prove fruitful for future research. The role of public relations, employee relations, investor relations and marketing in managing expectations deserves more attention. Furthermore, the role of the firm in constructing reality to appropriate resources could probably be linked more closely with the literature on leadership and corporate culture (Rindova and Fombrun 1999).

Researchers may also be keen to collect empirical data on the management of expectations. In doing so they would need to generate measurement techniques for the various constructs that have been discussed. Initial studies could seek to concentrate on the frequency of usage of various expectations management techniques and the correlation between technique utilization and profits.

One of the challenges of expectations management (EM) is to define the boundaries of the approach. Questions such as where, when, and with whom will EM work have not yet

Table 1. Targeted Areas for Action

Process Area	*Action. How do I?*
Identify	1. Set realistic expectations about the value of an opportunity.
Assemble	2. Project confidence to overcome a fear of failure among investors.
	3. Project a reputable and trustworthy image.
	4. Offer to fulfill the intangible needs of stakeholders in return for financial support.
Maintain	5. Avoid holdup by managing the claims and expectations of factor owners.
	6. Build trust in the organization to improve participation in opportunity identification and implementation.
Release	7. Maintain goodwill with stakeholders during downsizing exercises.
	8. Alter the perceptions of the acquisition value of the firm or asset.

been addressed. Casson (1982) has argued that experienced businesspeople should be less susceptible to attempts to manage expectations than other groups although this awaits empirical verification. Also, empirical research is required to assess the relative contribution of EM to profitability.

Notwithstanding the results of empirical research, the field is unlikely to see universal strategies or rules for managing expectations. Like product and financial markets, factor markets constantly adjust prices in response to new information, including information on successful trading strategies. Consequently, it is unlikely that textbook strategies for managing expectations will be developed. Successful strategies will remain private and highly subjective (Kirzner 1973). General theories and post hoc analysis are likely to be the order of the day.

Ethical Issues in Expectations Management

Entrepreneurs may protest that the theory prescribes unethical behavior and projects them in an unflattering light, particularly when it goes against the prevailing myth of the entrepreneur as an innovator, job creator, and engine of economic growth (Nodoushani and Nodoushani 1999). Is EM an unethical practice that damages long-term venture viability or is it sometimes justified?

Gibson (1994) presents an interesting hypothetical in which an art dealer finds a very valuable old master at a garage sale for $10. This is very similar to the DOS case presented at the start of this article. There are several views about the morality of these types of cases in the ethics literature. At one extreme is the golden rule—do unto others as you would be done by—in this case the art dealer should disclose all relevant information about the painting before the negotiation begins (Provis 2000). Most business ethicists see this solution as unrealistic and impractical. Provis (2000) suggests that, at the very least, the art dealer should indicate to the seller that the seller's knowledge is incomplete. Creating false beliefs or knowingly causing the seller to act in a way that she might regret is seen as morally wrong.

Other business ethicists argue that while it is always wrong to lie about material facts, it is reasonable to bluff about how much you are willing to pay, so long as the opportunity for mutual gain exists (Strudler 1995). In this view, Bill Gates was not acting unethically in the DOS deal because SCS was better off selling DOS than not selling it. A related school of thought argues that *any* form of deception (including deliberate misrepresentation or omission of pertinent facts) is morally regrettable because it wastes society's resources on protracted negotiations and inefficient deals. However, a person would not be morally wrong in using deceptive tactics, if *not* doing so would expose her to significant risks or costs (Dees and Cramton 1991, 1995). Thus, it is not morally wrong for an intended victim to lie to a potential murderer about her location. Using this line of thought, the art dealer should only pay $10 for the painting because the seller is better off and the art dealer avoids the risk of losing the windfall profit to the seller.

Putting the two arguments together would suggest that all tactics to influence expectations are morally regrettable, but if both sides stand to gain from the exchange and the party with the superior information has a lot to lose if the information asymmetry is corrected, then it is not morally wrong to withhold information. This is sometimes referred to as the "self-defense" theory of business ethics (Strudler 1995). Expectations management is only unethical when lying (deliberately giving false information) or deception (deliberately omitting important information) results in a stakeholder being worse off than their initial position. This suggests that Gates acted ethically because he had a lot to lose if SCS became aware of his intentions and SCS still benefited from the deal.

The effect on an entrepreneur's reputation also has to be considered. If an entrepreneur acquires a reputation for deception, then potential stakeholders may not be willing to enter into future transactions with her. Some authors argue that it is always better to tell the truth because dishonesty degrades the firm's reputation, which destroys value in the long run (Cialdini, Petrova, and Goldstein 2004). However, the Microsoft case belies this theory; in fact, Gates may have acquired a reputation as a tough negotiator, which may have even improved Microsoft's long-term value (Weigelt and Camerer 1988). As a general principle, one-off negotiations will have less impact on reputation than repeated transactions with the same party. This suggests that expectations management should be utilized less in the maintenance phase of the resource management process. But even in the maintenance phase a stakeholder still has to become *aware* of the deceptive practices to become aggrieved and seek to renegotiate. The value of an individual's contribution can be very difficult to measure and, as we saw in the Apple case, employees may even be happy working longer hours and unaware of the "productivity gift" they are giving the company.

This does not mean that expectations management cannot be a win-win situation. In fact, we have argued that ethical EM *always* produces a win-win situation. However, win-win is not an objective in itself. It is only a useful strategy if it produces more profit for the entrepreneur (Gibson 1994). The art dealer and DOS cases illustrate that complete sharing of information does not always produce more personal profit for the entrepreneur.

Conclusions

Any opportunistic, profit-seeking entrepreneur must solve the problem of assembling resources for less than their expected future value. The identification of an opportunity,

or the invention of a new product, is only the first step in wealth generation. Alexander Graham Bell may have invented the telephone but the idea was commercialized with financial support from two other partners, Thomas Sanders and Gardiner Hubbard, who recognized the future value of the investment (Brock 1981). Similarly, in our opening example, Bill Gates was able to manage the expectations of IBM and Seattle Computing Systems to generate enormous wealth for Microsoft without having invented the core product. The EM concept allows us to see that a common factor underlies a range of hitherto diverse entrepreneurial strategies and provides a new lens to view entrepreneurial behavior.

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Preparing Your Business for Valuation

Margaret D. Nowicki
Eric E. Lewis
Jeffrey W. Lippitt

There is a tremendous need for the valuation of small businesses. Oftentimes, small businessowners do not have the wherewithal to gather the data and keep it up to date for use in situations that require valuation. Formal valuations are necessary because they provide objective evidence of value, in contrast to value set by markets on which public companies are traded. This article focuses on some factors that impact the valuation of the business and will help small businessowners feel more comfortable talking with financial professionals about how the business might be valued.

Whether for tax, legal, or business reasons, there is a tremendous need for the valuation of small businesses. Oppressed minority shareholder suits and equitable distribution actions are the most common legal reasons for valuations, while purchases and sales of companies are common business reasons. Oftentimes, however, small businessowners do not have the knowledge or the wherewithal to gather the data and keep it up to date for use in situations that require valuation.

Small businesses are usually controlled by few people and shares of stock are not regularly traded on any exchange. Nevertheless, formal valuations are necessary because they provide objective evidence of value, in contrast to publicly traded companies where value is set by the markets on which they are traded. Owners often develop expectations concerning the value of their company by utilization of "Thumb Rules," such as a multiple of gross fees, a multiple of the number of hotel rooms, or a multiple of the number of seats in a restaurant. These approaches are very imprecise and often overlook important factors effecting value (Howe and Lippitt 1997). Consequently, when the outcome is quite different from the owners' expectations, owners are often surprised and dismayed at the result of the formal valuation. Much of the surprise can be taken out of the valuation if the owners are willing to plan for it well in advance and if they are familiar with the factors that impact the valuation of the business. Careful preparation for the valuation can yield additional benefits such as a lower cost for the valuation and an earlier completion date. Owners can do a number of things that will directly impact the valuation outcome and they can make some basic calculations that should give "ballpark" indications of that outcome.

This article highlights some financial topics that businessowners would be well advised to pay attention to as they plan for the valuation of their business. The article focuses on some of the factors that impact the valuation of the business and will help small businessowners feel more comfortable talking with financial professionals about how the business might be valued.

Though the valuation calculation is generally quite complex because it involves the consideration of many factors and because the approaches used to value businesses are varied, significant insight can be gained through understanding a few simple concepts. Regardless of the particular methodology employed, the value of a business is ultimately dependent on the following factors:

- magnitude and duration of future economic benefits,
- risk associated with the future economic benefits,
- marketability of the business, and
- nature and extent of the contributions of the owner/manager(s) to the business.

Valuation Model

One of the most commonly used approaches to valuing companies is the earnings capitalization approach (Howitt 1993; Mastracchio 1991; Pratt 1989). This method is an example of an approach that bases the value of a business on the future benefits that accrue to the owners of the business. The earnings capitalization approach bases the value of a business on the earnings that it is expected to generate. The expected future earnings stream is converted into a value by "discounting" it using a capitalization rate, as follows:

$$V = E / C$$

Where:

V = the estimated value of the firm
E = the expected earnings of the firm
C = the capitalization rate

Expected earnings (E) are generally evaluated by reference to the most recent five years of adjusted accounting earnings. Earnings over this period are generally summarized through the use of a simple average or, if a growth pattern or trend is evident, a weighted average. The capitalization rate (C) is a financial measure that indicates whether an investment will yield an acceptable return. It is based on the valuator's evaluation of the business's risk level and on the expected earnings growth pattern. This method yields a "going concern" value (V) for the firm and includes any "goodwill" value that results from above normal earnings rates. It is important to note that the capitalization rate can

be converted into an earnings multiple by taking its reciprocal (e.g., a capitalization rate of .10 yields an earnings multiple of 1/.10 or 10 times earnings as the value of the business). Hence, to increase the calculated value, either earnings must increase or the capitalization rate must decrease. To detail the valuation process more clearly, Figure 1 serves as a flowchart overview of the valuation process used with the earnings capitalization method.

The Importance of Earnings and Earnings Adjustment

Financial accounting statements and tax returns are important sources of information for developing expectations about earnings. Although economic theory suggests that the value of a business is derived primarily from the expected future benefits associated with ownership, to form a convincing basis for valuation, expectations must be grounded in the objective evidence of the business's past financial performance. The first step in developing the earnings base of the business is to adjust the accounting earnings for related party transactions and for differences between accounting and economic values. Related party transactions are transactions between parties but they are not at arm's length. For example, the salary of an owner-employee is not at arm's length nor is a loan to and from officers. This is important for there is no assurance that the non-arm's length transactions are set at market price. Consequently, income of the business can be easily manipulated by changing related party transactions when these transactions are restated to market price. This, however, does not affect firm value. Differences between accounting and economic values often result due to the purchase of assets from years ago and from the market value change that has since resulted. Depreciation charges on historical values will not represent the cost of using assets in business so the costs must be adjusted. Quite often, this adjustment reduces reported earnings and reduces the value of the business. Consequently, related party relationships, such as related party salaries, must be reviewed and adjusted to market rates and amounts.

Related Party Salaries

Many owners of small businesses are in the dual roles of owner and manager. This duality is common and is often fundamental to the success of the business. One job of the valuator is to carefully separate the financial implications of these two roles. While the benefits of ownership and employment

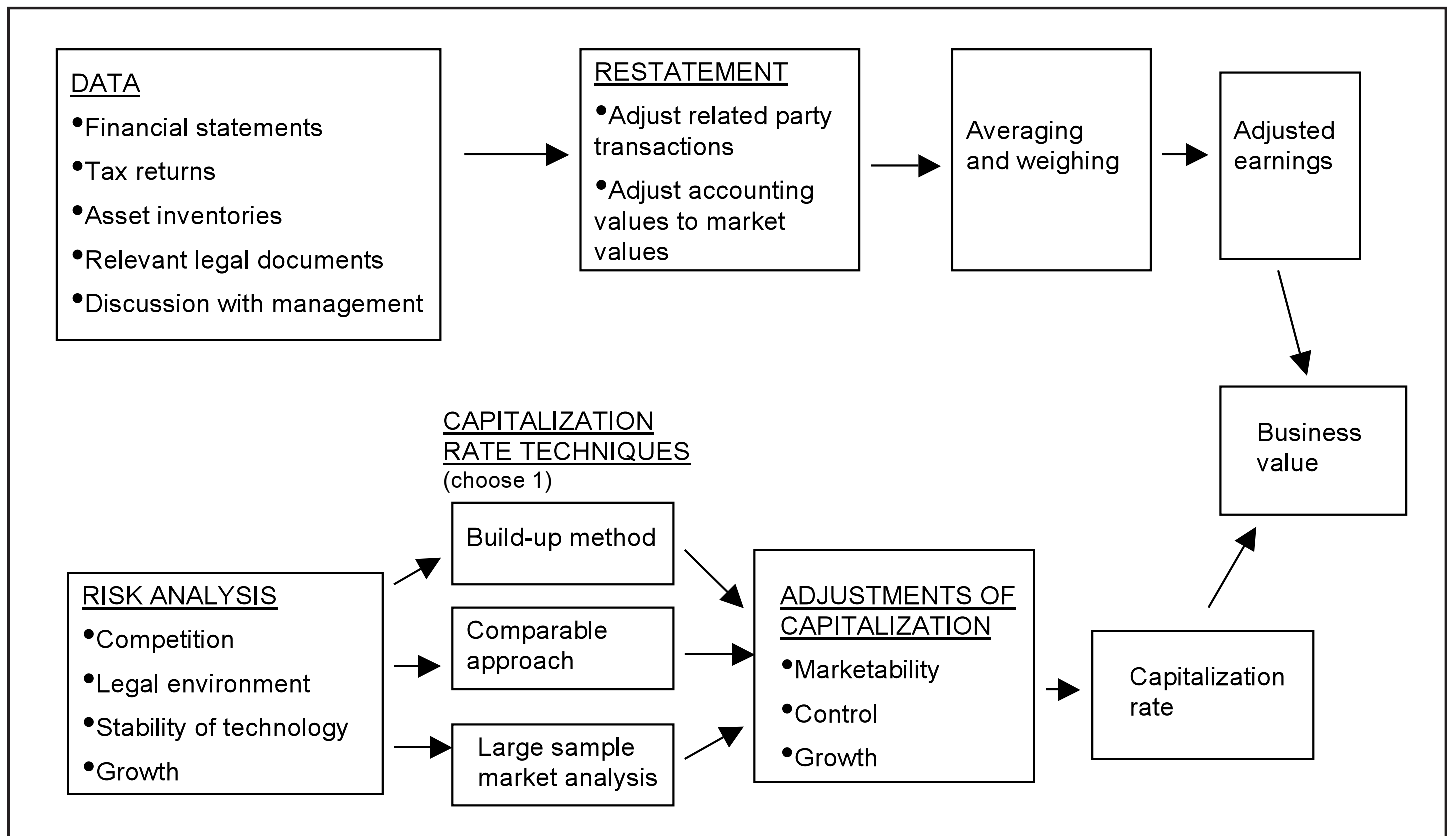

Figure 1. Valuation Process Used With the Earnings Capitalization Method

flow to the same person, their implications for the valuation are quite different. The salary paid to the manager is a cost of the business and reduces both earnings and value. The business income distributed to the owner is the primary benefit of ownership from which the value of the business is derived. The valuator will generally not rely on the salary levels set by the business to distinguish between ownership returns and employee compensation. Instead, the valuator will estimate market salary levels based on reference to the salaries of nonowner managers within the same business or in similar businesses or to an independent salary survey (Lippitt and Mastracchio 1993).

Many owners take great pride in the enormous commitment of time and energy that they dedicate to the business. While this pride often results from general beliefs that "hard work is a virtue" and that "commitment is an important part of what made this business a success," these beliefs have an important impact on value. That is, the greater the commitment of time necessary to manage the business, the greater the cost of the "market salaries" that are subtracted from the earnings of the business—hence, the lower the value of the business. It is important for owners to be efficient in their work and to look for ways to economize their time without endangering the stability of the business to increase the value of their firm. From the perspective of the valuation, the owner's time has a real cost and should not be used when other less expensive or more efficient resources can be used to accomplish the task.

The Importance of Fair Market Value Adjustments

Accounting statements are based on historical transaction prices to a great extent so it is necessary to make adjustments to them to reflect market values as of the date of the valuation (Pratt 1989; Mastracchio 1991; Blackman 1992). Differences between accounting values and market values can arise for a number of reasons including inflation, changes in technology, and changes in supply or demand for an item. When significant, both the cost of sales and the depreciation expense are adjusted based on appraisal values. The adjustments commonly result in increased expenses, which decrease both the earnings and the value of the business. A small businessowner has little influence to make an adjustment in his or her favor. Consequently, it is important that the small businessowner be informed that it is likely to happen and should adjust personal expectations accordingly. It may also be in the small businessowner's favor to begin gathering information of market values to provide to the valuator.

The Importance of Documenting Miscellaneous Earnings

It is clearly in the best interest of businessowners contemplating the sale of the business to be certain that all of the earnings of the business flow into the financial records. In addition to the obvious legal, ethical, and moral consequences of alternative courses of action, every additional dollar of earnings is likely to add many dollars to the value of the business. "Under the table" income and unreported bartering transactions, if not included in the valuation income stream, can cost the owner a significant portion of the true value of the business.

The Importance in Understanding the Capitalization Rate

The calculation of the capitalization rate is affected by many factors including the risk level of the firm and the expected growth in earnings. All business enterprises endure some level of risk. It is the assumption of risk that affords businessowners the right to have an expected return on invested capital greater than lower risk investments. Higher risk results in higher discount rates, whereas higher growth results in lower discount rates. The larger the capitalization rate, the lower the resultant value of the business. Valuators will typically use one of three approaches to generate a capitalization rate: the build-up method, publicly traded comparables, and large sample market rate estimation techniques. The build-up method begins with a risk-free rate of return, which usually is the 90-day treasury bill rate. The valuator will add a premium to this rate for the generally higher return of bonds over treasury bills, and another premium for the higher return of equity over bonds, yielding a general equity rate. Finally, an adjustment is made to reflect the unique set of risks and opportunities facing a business and its industry, after considering many or all factors including industry-level risk, firm-specific risk, growth, marketability, and capital expenditures. An alternative approach to this process is to use publicly traded comparables to obtain a rate. If the valuator can identify a publicly traded firm with the same level of risk, the capitalization rate can be obtained by using the inverse of the price/earnings ratio (Howe, Lippitt, and Lewis 2002). Data to support this process is available through Risk Management Associates, Research Insight, and the SEC's Edgar database along with a wide variety of other electronic and hardcopy sources. A final alternative is to use a large sample of publicly traded firms from the same industry as the firm being valued and then complete a data analysis that will extract capitalization rates (Lippitt and Mastracchio 1993). The build-up method is perhaps the most commonly used and easiest to understand. The remaining discussion refers to factors related to the build-up method.

Associated Risk: Industry-Level

Industry risks must be considered by valuators when they assess the overall risk level facing a business. These risks can include sensitivity to any number of elements such as the

prices of complementary or component products, government regulations, economic indicators, or normal business cycles. They can also include some of the environmental and product-related concerns discussed below. A careful review of recent issues of trade publications can usually give owners a good starting point from which to begin a list of factors that tend to impact all businesses in their industry. An understanding of these risks can help the owner mitigate the negative impact on firm value.

Associated Risk: Firm-Specific

As valuators attempt to quantify the risk level that a particular business operates under, there are several common considerations. Competition is a very common risk to both large and small businesses. The competition may be realized as actual or potential. Potential competition is given greater weight when barriers to entry in the business's industry are very low. The greater the ease of entry by new competitors into a market, the more at risk is the profitability and growth of an existing enterprise. Actual competition can exert downward pressure on the growth potential of a business. A business that is often found defending its market presence against an aggressive competitor can suffer decreased margins and other problems that reduce its ability to grow and impede its long-term profitability. Alternately, if a firm enjoys a sustainable competitive advantage, this can dramatically increase the value of the business. Such advantages can include special relationships with suppliers and/or customers, protected technologies, or control of preferred operating locations.

Product liability considerations can create significant uncertainty regarding the future earnings of a business. Due to the inherent uncertainty regarding the outcomes of litigation surrounding this issue, unresolved claims of product liability can loom as doubt regarding the long-term profitability and ultimate viability of an enterprise. If owners seek to increase the value of the business, it is often best to resolve these claims and other types of litigation prior to the valuation.

Environmental concerns can present significant risk to businesses whose manufacturing or delivery systems create hazards that could result in levies or other sanctions by regulatory agencies. Retailers and wholesalers of petroleum products, chemical manufacturers, dry cleaners, and many others can face significant risks regarding the value of potentially contaminated property that is used as a delivery point for their products or a disposal point for their waste.

Financial leverage is another factor that valuators must consider when adjusting the equity capitalization rate that the build-up method yields. Modigliani and Miller (1958) proposed an adjustment to reflect the additional risk that leverage imposes on the equity holders of a business relative to a pure equity situation. The adjustment uses the debt-equity ratio of a business to increase the capitalization rate for companies that carry debt. The more debt relative to the business's equity, the higher the capitalization rate premium for leverage and the lower the resulting value of the business.

Overall, it is important for owners to consider and understand the unique risks that the business faces in order to assist the valuator.

The Importance of Growth

Businesses that have experienced significant earnings growth in the past are likely to be valued at a premium if that growth is expected to continue in the future. There are several ways of handling growth in the valuation process. One way to get an idea of the impact on value is to subtract the growth rate from the capitalization rate. The lower capitalization rate will result in a larger value. Many valuators are reluctant to reduce the capitalization rate for the full amount of the growth rate, due to concerns that the growth is not sustainable indefinitely. Hence, the small businessowner should remember that growth is great and will increase the valuation, but it is growth in adjusted earnings that matters, not accounting earnings.

The Importance of Marketability

The more that the business is known for its services and products independent of the owner, the less difficult it should be to maintain the value of the business when it is transferred to a new owner. In some circumstances, it is advantageous to give high visibility to carefully chosen key employees. Employees who remain with the business after the transfer of ownership can provide important continuity for customers and help maintain goodwill.

The Importance of Capital Expenditures

The need for future capital expenditures to maintain the current earnings stream decreases the value of the firm (Lippitt and Mastracchio 1993). Selecting an appropriate strategy regarding capital expenditures preceding a valuation is a challenging task. Capital investments that would not make business sense if the current owners were planning to retain the business are unlikely to contribute positively to firm value just prior to sale. On the other hand, upgrading productive capacity to incorporate more efficient technology or increasing capacity may increase value by far more than the expenditure, particularly if there is time to generate a track record for the new equipment.

To a certain extent, capital expenditures just prior to sale impose the decisions of the old owners on the new owners. For example, consider a couple preparing their residence for sale. If the house needs painting, the current owners must decide whether to paint the house themselves or to leave

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that task for the new owners. The new owners may not want to have to worry about painting along with the other chores that go with the move; however, they might really have preferred to choose their own color and quality of paint. Consequently, it is important to consider the following:

- *How clear are the choices that must be made?* If the choices involved in the project are fairly clear, it favors the current owners making the capital expenditure because the loss of flexibility for the new owners will be minor. The greater the range of choices and the implications for the future of the business, the stronger the argument for deferring the expenditures.
- *Who is in the best position to make these choices?* The more that the decision depends upon the particular circumstances of the business, the more likely that the current owners should make the expenditure. The current owners have experience with the firm including its equipment and suppliers. New owners will need time to acquire the necessary experience to make a good decision.
- *How much risk is involved in the changes?* Risk is very much the foe of value. If current management is in a better position to deal with the risk associated with the expenditure, they should probably take care of it. The new owners may be reluctant to undertake the risk and therefore may be willing to pay less if they must shoulder the responsibility.

Summary of Issues

Factors that Enhance Business Value

- Established growth trends
- Capital projects with short-term payback
- Resolving uncertainty such as lawsuits or employee disputes
- Higher earnings due to more efficient operations
- Establishing clear evidence of sustainable competitive advantages

Factors that Impair Business Value

- Negative growth trends
- Capital projects with high front-loaded cash outflows
- Dependence on a small number of large customers
- Difficulty of transferring goodwill to new owners

A discussion of preparing your business for valuation should not end without a mention of the materials that will generally be required for a valuation. These items include:

- tax returns for last five years;
- financial statements for last five years;
- detailed listing of fixed assets (appraisals may be necessary);
- information on industry norms from independent parties such as trade organizations;
- list of related parties and a description of all significant related party transactions;
- job descriptions of all related party employees;
- history of the business;
- copies of franchise agreements, leases, and distribution agreements;
- history of the significant events of the business;
- copies of the minutes of board of director meetings;
- copies of deeds;
- list of competitors, new entrants, and any companies that have gone out of business; and
- information of any similar companies that have changed hands.

Keeping these items nearby as the businessowner takes an active role in preparing himself or herself for a valuation of the business will further facilitate the valuation process and enable the owner to not be surprised when the valuation outcome is handed down.

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Creating a New Program in Entrepreneurship Education: A Case Study in Colombia

Kirk C. Heriot
Noel D. Campbell

Entrepreneurship has been widely recognized as having greatly influenced the United States. Its influence has especially been documented over the past 20 years. Paralleling our societal interest in entrepreneurship has been increasing interest in entrepreneurship education. While our interest in entrepreneurship education has grown considerably over the past two decades, this field of study continues to have critics both within and outside of schools and colleges of business (Kuratko 2004). In spite of these criticisms, some researchers suggest that the United States is still far ahead of other regions of the world in terms of entrepreneurial education (Solomon et al. 1998).

Using entrepreneurship education in the United States as a point of departure, this article uses a case study to analyze the efforts of a private university in Bogota, Colombia, to create a new program in entrepreneurship. The Colombian Legislature passed Law 590 in July 2000 as a means to promote and develop entrepreneurship in the nation. Shortly thereafter a private university in Bogota started a new program in entrepreneurship. At the university's invitation, a small number of faculty from U.S. universities participated in the school's "kick-off" efforts. The paper offers analysis and recommendations based on five criteria: 1) What is taught, 2) Why it is taught, 3) How it is taught, 4) How well it works, and 5) Leadership support. In addition, rather than simply adopting a U.S. or European model of entrepreneurship education, the authors propose that they should develop a center that integrates lessons from other models with elements that are relevant to the local situation.

Colombia is a South American country widely perceived to have a variety of political and economic problems. The country suffers from a reputation as one of the most dangerous places in the world with more than 20,000 kidnappings each year (U.S. Department of State Website 2004). Much of its endemic violence is tied to the drug cartels that control many parts of the country.

In addition to political unrest, the Colombian economy has suffered a series of setbacks that have dissuaded outside investors (U.S. Department of State Website 2004). Perhaps in response to their economic problems, the Colombian legislature passed Law 590 in July 2000 to promote and develop entrepreneurship in the hope that Colombia could reap the benefits of entrepreneurship that other developed and developing nations seem to enjoy.

One author visited a private university in Bogota in November 2001 to present a seminar about export opportunities for Colombian small businesses. The university is a small, private, tertiary educational institution located in Bogota. The university was founded in the 1980s and offers degrees in law, industrial engineering, marketing, business administration, economics, finance and international trade, and philosophy. While visiting the university, a finance faculty representative informed the visiting author that the university would like assistance in starting a program in entrepreneurship. The process concluded in May 2004 when the same author returned to Bogota to offer additional advise on the proposed academic programs in entrepreneurship.

The purpose of this study is to describe our efforts to help the university create a program in entrepreneurship. As research on entrepreneurship education in developing nations is still in the exploratory stage (Garcia 1999), our choice of a research design was influenced by the limited theoretical knowledge researchers have of entrepreneurial education (Fiet 2001a). In this situation, it is appropriate to use a qualitative research method to gather the necessary information (Eisenhardt 1989; Yin 1994). The current research necessitated that we follow the process of starting a new entrepreneurship and small business center in great detail. Thus, we adopted a research method described by Audet and d'Amboise (1998) that was broad-minded and flexible. Like their study, our aim was "to combine rigor, flexibility and structure without unduly restricting our research endeavor" (Audet and 'Amboise 1998, p. 11).

We use a case study (Yin 1994) to describe the university's efforts to create a program in entrepreneurship. The literature suggests that many models of entrepreneurial education are followed (Fiet 2001a, Solomon, et al., 1998, and Shepherd and Douglas 1997), using a variety of pedagogies (Solomon, Winslow, and Tarabishy 1998), in many American and European colleges and universities. We had to choose a means for evaluating and advising the proposed program, given the director's desire to start a program that (1) teaches entrepreneurship; (2) conducts entrepreneurial research; and (3) provides consulting services. We decided to conduct the research project using a three-step approach. First, we began by surveying the extant literature to sample the models for creating and operating an entrepreneurship education program. Second, we evaluated the current state of the university's fledgling program. Third, we offered suggestions on what

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the university should do to start its entrepreneurship program. This article suggests ways that the university can best implement the proposed center by integrating its efforts across all of its business disciplines. Lastly, we used this information to draw conclusions about the efficacy of importing a U.S. model of entrepreneurship education into Colombia as well as how other tertiary educational institutions in Latin America can pursue the creation of new entrepreneurship centers.

Supporting Literature

The literature on entrepreneurship education in developing nations is still in a developmental stage (Garcia 1999). A review of the extant literature on entrepreneurship education shows that the field has been evaluated from a variety of perspectives including what is taught, why it is taught, how it is taught, and how well it works (see Gorman and Hanlon 1997; Vesper and Gartner 1997; Solomon, Winslow, and Tarabishy 1998). The problem with assessing entrepreneurship education is that no generally accepted pedagogical model has been adopted in the U.S. or Europe (Solomon, Winslow, and Tarabishy 1998). Given that some researchers suggest that "[t]he concept of entrepreneurship is inadequately defined [, and] this lack of a clear entrepreneurship paradigm poses problems for both policy-makers and for academics" (Carton, Hofer, and Meeks 1998, p.1), the state of entrepreneurial education cannot be too surprising. If we cannot agree on the phenomena we are discussing, it becomes very difficult to develop a curriculum or build an academic program based upon those phenomena.

Solomon, et al. (2002) discuss the results of a 20-year investigation of teaching entrepreneurial education and small business management in the United States. Their data are based on six national surveys. They believe a trend exists toward greater integration of practical applications and technology. They note that new venture creation, small business management, and small business consulting remain the most popular courses in the field.

Shepherd and Douglas (1997) argue that entrepreneurial education falls into four categories: the old war stories approach, the case study approach, the planning approach, and the generic action approach. The old war stories approach provides a series of success stories told by entrepreneurs. The emphasis is on experience, intuition, and judgment. The leader's innate qualities are emphasized without any recognition of the contribution of the organization or the environment. This approach uses very little theory and emphasizes anecdotal evidence. The case study approach assumes that entrepreneurship is "a process that is a controlled and conscious thought process" (Shepherd and Douglas 1997). Mintzberg (1990) argues that this perspective assumes that formulation can be separated from acting, as if the world stands still while the planning occurs. The planning approach breaks a controlled, conscious process into a series of steps that lead to a full-blown strategy, often in the form of a business plan. Meyer (2001) argues that the use of business plans may be problematic. He questions whether we have validated the hypothesized positive relationship between business plans and firm performance. Shepherd and Doyle (1997) also question their usefulness because the very nature of planning is designed to extrapolate known trends. Thus, the planning process is too inflexible to accommodate the entrepreneurial spirit. The generic action approach is linked to the competitive markets model. It assumes that market forces, such as bluffing, price deterrence, and the timing of entry, dictate action. "Once formulated, there is no need for initiative, 'only' implementation" (Shepherd and Douglas 1997). This approach argues that after scanning the environment, the entrepreneur will be able to draw appropriate conclusions necessary to move in the right direction. Shepherd et al. are critical of this approach, arguing that this form of entrepreneurship education emphasizes the science of entrepreneurship while ignoring the art of entrepreneurship. Shepherd et. al. emphasize the importance of creative thinking and learning throughout entrepreneurship education. They believe entrepreneurship should be taught so that the direction is deliberate but the details are emergent.

Vesper and Gartner (1997) present the survey results of ranked university entrepreneurship programs. The top seven criteria for ranking these programs were courses offered, faculty publications, impact on community, alumni exploits, innovations, alumni start-ups, and outreach to scholars. American universities may wish to focus on these criteria as it develops a new entrepreneurship program. It remains to be seen if these criteria are meaningful or affordable for universities in other countries, particularly developing nations.

Garcia (1999) argues that Puerto Rico's economic development should be centered on small and medium enterprises (SME). She believes that such a model of economic development must focus on the educational system, arguing that "it is critical to take into consideration the region's history and informal context when designing entrepreneurship education models" (Garcia 1999, p. 1 of 7). Nonetheless, at the time of its publication, the article had not gathered information on measurable outcomes. The entrepreneurship program she described was only at a pilot stage, thus it remains to be seen whether her advice will be supported by the program's performance. Nonetheless, it represents the only commentary on the efficacy of a U.S. entrepreneurial education model in a Spanish-speaking area.1

Schaper's (2000) comments are also particularly useful as they directly consider the implications of transferring an entrepreneurial education system from one nation to another, arguing one must consider whether entrepreneurship

concepts and skills can be transferred across borders. Transferring entrepreneurship to another region of the globe presents a variety of challenges. Schaper states that cultural issues impact entrepreneurial education because perspectives on risk-taking, individual initiative and personal achievement are different in different cultures. He concludes that a variety of techniques and methods should be used to teach entrepreneurship. Schaper's concerns are echoed in Albert and Watkins (1999): "We could go on, but let's just mention the challenge of multidisciplinarity, the desirability of multi-establishment co-operation, the need to continually develop new materials, the necessity to tailoring materials to local cultures and economic systems" (Albert and Watkins, 1999, 33).

The University in Colombia

The director of the proposed program indicated two objectives for the program. First, he wrote, "Our university (Universidad Sergio Arboleda) has the objective [sic] to be a leader working with SME and want [sic] to reinforce its relation with that sector considering its importance for the Colombian economic [sic]."

The second objective was to determine "how the university could collaborate to the development [sic] of the Colombian [SMEs] through research and consultant or assistance to improve management and how the university could promote an entrepreneurship culture to create new small business [sic]." The director wanted the new program to instill an entrepreneurial spirit in the students and to inspire graduates to start new commercial ventures and entrepreneurial firms. However, the program organizers were unsure of the metrics that would be appropriate for this goal. They had not had any significant "success" stories to describe over their brief history. Implied in all of this information was a desire to begin offering courses in entrepreneurship that were not being offered when the first author visited the university.

The primary investigator visited Bogota in November 2001. This initial visit permitted firsthand observation of the city, the university, the faculty, small business owners and students. The university is a private university located in Bogota. Founded in the 1980s, the university has a very small physical infrastructure, occupying only a portion of one city block. Nonetheless, the facilities were not below the U.S. observers' expectations and there were at least two ongoing construction projects, including the building that houses the College of Finance and International Trade.[2] Classrooms were fairly modern and computers were available to students. One of the few differences visible to U.S. observers was the lack of private offices for faculty and staff, as the College of Finance and International Trade faculty shared a single room with work areas divided by partitions.

The university enrolls approximately 3,800 students in a variety of professional and liberal arts programs. The point of contact for this study was a senior faculty member in the College of Finance and International Trade, one of four colleges at the university that emphasize a business function. The other programs are marketing, economics, and business administration. Each college is similar to a department-size unit in a typical U.S. school or college of business, and operate quite independently of the other colleges. Students in one college take few courses in the other colleges. This model clearly differs from a typical U.S. business administration plan of study whereby students are expected to take a variety of common professional courses (i.e., finance, management, marketing, and economics) regardless of their major (accounting, marketing, operations management).

The typical plan of study in the university's business program requires 10 semesters of study. The first 7 semesters focus on detailed studies within a respective discipline. Students are expected to work as an intern during their eighth semester. Unlike U.S. universities, students do not generally take a balanced load of general education courses as well as courses within their business major. In addition, students do not take a strategic management course or any other common capstone course in general management.

As of November 2001, the university did not offer any courses in small business management, entrepreneurship, or new venture creation. Furthermore, the university did not have any faculty with formal training in entrepreneurship or experience starting and managing a new business or an entrepreneurial firm other than the university president, who founded the university. Many faculty members did not have degrees beyond the master's level. However, the program director has more than 30 years of industrial experience including extensive experience in joint ventures with American firms. While this experience may not lend itself to entrepreneurial education per se, it should help the director to administer and lead the center once it has been developed.

The university appeared to have strong relationships in the business community. During the second day of the first visit in 2001, more than 50 business executives from small firms attended a conference that included presentations from government officials, professional consultants, and university faculty emphasizing ways that the Colombian small firms could export their goods and services. A similar program on the second visit in May 2004 had even more participation from business executives from small firms, government agencies, and public universities.

Analysis and Recommendations

Upon reading the literature on entrepreneurship education and observing the current situation at the university, one of the few definitive conclusions one can reach is that the university is starting its new program with very few visible, tan-

gible resources. However, it may possess intangible resources that may benefit the center. The large turnout for the seminar represents an impressive network of small firms to draw from in the community. These firms could very easily be the source of guest speakers and benefactors for the program. The sheer size of Bogota, portends a great deal of potential for any business-oriented centers or programs.

In spite of its resource base, we believe the proposed center should focus on five criteria as part of its planning process. These criteria are consistent with the areas of interest described in the supporting literature. They are based on a synthesis of Vesper and Gartner (1997), Solomon, et. al. (2002), Katz, (2003), and Kuratko (2004). The five criteria are:

1. What is taught.
2. Why it is taught.
3. How it is taught.
4. How well it works (see also Gorman and Hanlon 1997).
5. To this list we add a fifth criterion—"leadership support."[3]

Leadership Support

Leadership support is not specifically discussed in the entrepreneurship education literature. However, it is important to understand the contextual differences between programs in entrepreneurship in American universities versus universities in developing nations. The entrepreneurship programs highlighted in the extant literature have robust support systems. Additionally, the U.S. and European universities that started new entrepreneurship programs are, themselves, supported by stronger national economies and more government stability than Colombia. While the phenomena of entrepreneurship may not be as articulated and accepted in Europe as in the United States these countries are more stable and economically sound than Colombia. Lacking tangible financial support and an aggressively established entrepreneurial education movement, it is imperative that the university's president supports the creation and administration of the proposed center. Twaalfhoven (1999) argues that financial support and human resource support are critical. The university will need to hire additional faculty. In addition, the center will need to determine the budget necessary to operate. Twaalfhoven's comments regarding external funding by alumni and entrepreneurs are particularly germane. Many entrepreneurship programs in the United States were created or expanded following very substantial contributions from generous individuals. While the university may not have access to these sources of funding presently, it may turn to the government funding available through Law 590. Until such support materializes, university leadership must make the commitment to keep the new center afloat.

As of May 2004, the original acting director of the entrepreneurship center had been advanced to a new position in the finance and international business program. Thus, the university was seeking to find someone to permanently become the new director of the entrepreneurship program. Two adjunct faculty were teaching an entrepreneurship course when the second visit was conducted in May 2004.

Jose S. is an entrepreneur and former administrator in the Colombian Foreign Trade Ministry.[4] He completed his undergraduate degree in engineering at Purdue University and his MBA at a public university in Colombia. He has also completed an entrepreneurship certificate program conducted by a nonprofit organization in India.

Maria O. is a former honors student at the university with an undergraduate degree in finance and international trade. She is a very confident young woman that has shown a great deal of interest in teaching. However, she does not have any formal training or experience in entrepreneurship, nor does she have a graduate degree.

In June 2004, Jose informed the lead author that he had left the university.[5] He left the university to begin working with a competing private university in Colombia. Ironically, Jose provided the lead author with a timetable for creating the Center for Entrepreneurship (shown as Table 1). Thus, he was exercising informal leadership in spite of his role as an adjunct faculty member.

Thus, leadership of the program remains unresolved and may become a major impediment to continued success, unless the former director oversees the program or a new individual is selected to become the director.[6]

What Is Taught

The program should follow what Plaschka and Welsch (1990) call a trial and error basis. We strongly suggest that the program start with an introductory course in entrepreneurship. Initially, instructors may need to use an existing textbook that is tailored to their needs. Unfortunately, after discussions with textbook publishing representatives, we conclude that American publishers have translated very few entrepreneurship textbooks into Spanish.[7]

As successive courses are developed, the center should use feedback from students, faculty, and practicing entrepreneurs to identify gaps, deficiencies, and difficulties in specific courses. The plethora of courses that are offered in universities in the United States and Europe suggests that a large variety of topics will elicit interest. It would appear that new venture creation and small business management are among the most popular courses with students, and perhaps small business counseling as well. It is probably premature to offer a consulting course without considerable preparation by the faculty. Student-based counseling is very popular in the United States For example, the Small Business Institute program is twenty-six years old (SBI Website 2004).

Table 1. Schedule for the Implementation of the Entrepreneurship Program

Activities	*April 12/04*	*April 30/04*	*May 31/04*	*June 30/04*	*July/04*	*January 2005*
1. Identification and selection of physical place to locate the program. Initiation of activities	XXXXX					
2. Database compilation of information material to be used in the program.	XXXXX	XXXXX				
3. Database compilation of potential students to be involved in the entrepreneurship program	XXXXX	XXXXX	XXXXX			
4. Design of final structure of International Business Trips (VEC), and projections for the period 2004–2008.	XXXXX	XXXXX	XXXXX	XXXXX		
5. Database compilation of advisors to be trained in Entrepreneurship Development (University Teachers and Consultants)	XXXXX	XXXXX	XXXXX			
6. Design of functions manual for the program, defining registration and graduation option requirements trough business plans or export plans.	XXXXX	XXXXX	XXXXX	XXXXX		
7. Design of the research line on entrepreneurship as a graduation option, such as business plans or export plans.	XXXXX	XXXXX	XXXXX			
8. Incorporate the activities of the Exporters Center (ZEIKY) with the Entrepreneurship Program.	XXXXX	XXXXX	XXXXX			
9. Review and measure curriculum structure and other activities that match the program's activities.	XXXXX	XXXXX	XXXXX	XXXXX		
10. Promote the program's activities and services to the School of Business.					XXXXX	
11. Implementation of defined actions for the International Business Trips (VEC)					XXXXX	
12. Implementation of courses for advisors to be trained in Entrepreneurship Development (University Teachers and Consultants) and outsiders.					XXXXX	
13. Implementation and follow up of early identified business ideas of registered students.					XXXXX	
14. Promote findings in the research about entrepreneurship.					XXXXX	
15. Development of contacts with outsiders at national or international meetings.					XXXXX	
16. Implementation of the graduation option related to the program's activities.					XXXXX	
17. Promote the program's activities and services to the entire university community.						XXXXX

A critical review of well-known programs at other universities[8] suggests that it would be helpful to consider the following courses to support the academic program in Entrepreneurship:

- Entrepreneurial Marketing
- Entrepreneurial Finance
- Legal and Regulatory Environment
- New Venture Creation II or Entrepreneurship II, a follow-up to the introductory course in Entrepreneurship

Why It Is Taught

Our prior recommendation that introduction to entrepreneurship be the first course offered through the center is a fundamental decision. Entrepreneurship and small business management are very popular courses. However, it will be particularly important for students in a developing nation with the challenges that Colombia faces to learn why entrepreneurship is so promising.

Colombia faces many challenges, not the least of which is the crime and violence that dominate daily life. In addition, the country has not entirely embraced the economic, social, and legal freedoms that are so critical to entrepreneurship. The country still has remnants of its colonial past and its citizens are not guaranteed basic economic freedoms such as property rights that are largely taken for granted in most industrial nations. Thus, it may be important to compare and contrast entrepreneurship in Colombia with entrepreneurship in developed nations so that the students can begin to appreciate the many benefits that are possible from entrepreneurship.

The recommendation that marketing and finance courses be offered is consistent with the importance of these functions to any business endeavor (Association to Advance Collegiate Schools of Business 2004). A course in legal and regulatory issues is critical to the understanding of how Colombians can be entrepreneurial within the constraints imposed by their legal system. This course should emphasize the local conditions of law, contract enforcement, property rights transference and enforcement, access to capitalization, and property rights stability. We envision that this course should also compare and contrast the legal and regulatory environment in Colombia with the environment faced by entrepreneurs in other nations (Reynolds, Hay, and Camp 1999).

The use of a second course in entrepreneurship is consistent with our review of other programs as well as our discussions with more than 20 entrepreneurship educators at the Experiential Classroom, a program, now in its fifth year at Syracuse University, that discusses tools and techniques for teaching entrepreneurship. These educators believe that the first course can be used to teach students fundamental concepts in entrepreneurship, while the second course can be used to help the students apply the knowledge they have accumulated in the program by writing a business plan or completing some other major project.

How It Is Taught

Pedagogical issues are among the most debated in the entrepreneurship education literature (Fiet 2001b). A variety of techniques are used in entrepreneurship and small business management courses. These techniques include, but are not limited to, case studies, lectures, experiential exercises, business plans, consulting projects, and guest speakers. Just as entrepreneurship itself is often associated with creativity and innovation (see, e.g., Kuratko and Hodgetts 2001), teaching entrepreneurship has similar associations. The faculty should feel free to use any technique they believe will enhance the learning environment. As Schaper (2000) argues, numerous techniques are a wiser choice than only one or two regular techniques.

Nonetheless, while we expect lectures to be the primary pedagogy, we urge the university to consider other techniques that will force students to participate in the learning process. Given the nature of entrepreneurship and the desire of the university to instill the entrepreneurial spirit in its students, its seems entirely appropriate for its faculty to adopt teaching techniques that compel students to actively engage in learning as opposed to simply passively taking notes as an instructor conducts a lecture.

How Well It Works

The program can be evaluated using a variety of benchmarks. Vesper and Gartner's research (1997) indicate that highly ranked programs are evaluated based on course offerings, faculty publications, community impact, alumni exploits, innovations, alumni start-ups, and outreach to scholars. These categories reflect a set of U.S. standards that are the cumulative result of more than 20 years of teaching entrepreneurship. Garcia (1999) warns that using American standards and values to create a program in entrepreneurship outside the United States will not succeed. She argues that a program to teach entrepreneurship must reflect formal (economic and political systems) and informal factors (norms and culture).

We believe the university should select three or four standards that may or may not reflect the American experience. Then, the university should monitor achievements in those areas and compare the outcomes to its expectations. If it seeks input from entrepreneurs, then the input should be part of their assessment efforts (Solomon, Winslow, and Tarabishy 1998).

We believe the following standards represent an initial set of metrics that can be modified as the program grows or changes direction:

1. *Size of program based on student enrollments.* Is the program growing? Do increasing numbers of students begin to express an interest in entrepreneurship?
2. *Number of courses that are offered with greater than average enrollment (equal to or greater than the university average).* What courses seem to be receiving the most attention? Low enrollment may reflect lack of interest in a topic or it may simply reflect poor teaching on the part of an instructor.
3. *Number of academic papers that are presented by faculty over a five-year period.* Academic reputation may not be quite as important in Colombia as it appears to be in the United States. Nonetheless, it remains a metric that is easily understood and demonstrates the commitment of faculty to pursue professional development in the field of entrepreneurship.
4. *Number of new business ventures started or managed by participants in the entrepreneurship program.* This outcome may take several years to occur, but it is not unreasonable to expect some of the students in the program to use their newfound skills to start new business ventures.

Limitations

This study is limited by the nature of case studies (Yin 1994). The findings of case studies cannot always be generalized to other situations. However, given the lack of a universal model for entrepreneurship education, especially in a developing nation, it was both practically and theoretically appropriate to use a case study. While the results of this research may not specifically be extended to other Latin American universities, the faculty and administration at other universities may certainly use the current study as the basis for their own efforts to start an entrepreneurship and small business center.

Discussion

For the university in Bogota to successfully implement its program, it must find a means to selectively borrow from a variety of entrepreneurship education models in the United States and Europe. Our point of contact was with faculty in the College of Finance and International Trade. However, other business programs at the university should be involved in the proposed entrepreneurship and small business center. Shepherd and Douglas (1997) argue that one "must look beyond the limits of the functional disciplines." Presently, each of the business colleges at the university operates as somewhat autonomous units. Students do not necessarily become exposed to theories outside their relatively circumscribed major academic area. Yet, entrepreneurship is an eclectic discipline that borrows heavily from psychology, economics, marketing, and strategic management (Schindehutte et. al. 2000). We believe it would be a serious error if the entrepreneurship and small business center did not invite participation from faculties in marketing, economics, and business administration.

The university finds itself on the brink of an exciting adventure. Albert and Watkins (1999) note that entrepreneurship can be a challenging and time-consuming task. The field of entrepreneurship requires its advocates to think in ways that are very different than traditional business courses or business paradigms (Shepherd and Douglas 1997). While completely adopting a U.S. model for entrepreneurial education is not the best course of action (Garcia 1999), beginning with and modifying U.S. programs may be a wise place to start, given the apparent progress in American universities.

The university must be prepared to adjust its program to account for formal cultural resistance to entrepreneurship and entrepreneurship education. Many Latin countries still struggle with the social remnants of colonial administration. Powerful elements within society may resist entrepreneurial expansion of wealth and economic power, fearing it will further infringe upon their historical social and political control. Additionally, many Latin countries have large socialistic elements within society. Many factions of socialist ideology are determinedly antientrepreneurial. Due to this potential social resistance, universities may experience unusual difficulties in attracting private funds to their entrepreneurship center; a change in government may end governmental funding as more "conservative" or "progressive" (both potentially antientrepreneurial) elements come to power. Their entrepreneurship program may experience difficulty attracting quality students if entrepreneurship becomes a socially stigmatized or marginalized field of study. For similar reasons, universities should also consider that their graduates might face difficulties attracting customers, especially large corporate or government accounts, to their entrepreneurial firms.

Summary

We believe that the university has chosen to embark on a challenging and highly rewarding course of action. After reviewing the university's situation, we have recommended that it address criteria in five major areas in order to achieve their stated objectives. We believe the five criteria should be as follows:

1. *What is taught.* The university should start by offering a fundamental course in entrepreneurship that is followed by other courses such as entrepreneurial marketing, entrepreneurial finance, legal and regulatory environment and a "capstone" course.
2. *Why it is taught.* The university should also emphasize the benefits of entrepreneurship. Yet, it must do so in the proper context that recognizes the unique social and political differences between Colombia and the United States.

3. *How it is taught.* The program will probably use a traditional lecture method, but we believe that contemporary pedagogies should be adopted as soon as faculty and students become familiar with them. These pedagogies, such as student consulting and the case method, have received considerable attention among entrepreneurship educators. (See, for example, the Experiential Classroom at Syracuse University, currently in its fifth year. This program demonstrates several tools and techniques for teaching entrepreneurship.)
4. *How well it works.* We have suggested four possible metrics with an emphasis on student enrollment. Student demand for courses in entrepreneurship is a clear indicator of the viability of the concept, especially at a private university that does not have the benefit of public funding.
5. *Leadership support.* The university must select an individual to lead its entrepreneurship program. The transition of the original director to another position has left a void that had not been filled as of June 2004. The former director cannot continue to perform his current as well as his former duties.

Conclusions

The university must learn to recognize and embrace entrepreneurship in all of its forms and by all of its practitioners, and reject cultural formalism by focusing on the phenomenon, regardless of where it occurs or by whom. Entrepreneurship in Latin America may be robustly flourishing, but in the most unexpected place and carried out by the most unexpected people, as documented by De Soto (1989). Writing of Peru, De Soto finds that in Lima, Peru, alone, entrepreneurial "black marketers" "employ 439,000 people. Of the 331 markets in the city, 274 have been built by the black marketers…. …[T]hanks to them the citizens are able to get around, because 95 percent of public transportation belongs to them. …. Half the population of Lima lives in houses built by black marketers. … These numbers speak eloquently of the productive energy that restrictive legality has pushed into the black market." (De Soto 1989, pp. xiii-xiv) Of De Soto's work, Mario Vargas Llosa writes, "The concept of liberty, in all its sense, has never been seriously applied in our countries. Only now, in the most unexpected way, through the spontaneous actions of the poor, is it beginning to gain ground, showing itself to be a more sensible and effective solution than any undertaken by our conservatives and progressives as ways of overcoming underdevelopment" (De Soto 1989, p. xvii). If the university is willing to look for and embrace entrepreneurship in unlikely quarters, the university will find it.

The university must be prepared to recognize the need to adapt the "received wisdom" from U.S. and European sources (texts, instructors, speakers, and programs) to the local conditions of law, contract enforcement, property rights transference and enforcement, access to capitalization, and property rights stability. The United States and Europe have enjoyed stable political and legal systems and transferable and governmentally supported property rights for so long that frequently such issues no longer explicitly appear in academic analysis. Citizens, businesspersons, and academics take these conditions for granted. For example, consider teaching an American business case in which the business plan depends on rapid, easy, and legal acquisition of title to real estate, wherein title is conveyed based on a bank loan secured previously. Now consider teaching the same case in a society in which law and red tape prohibitively discourage legal transfers of real property, and in which banks lend only to certain social classes or castes, and almost never make mortgage loans. A business model, and its use in education, which works under the U.S. institutional framework may not work at all in other societies operating under other institutional frameworks.

Endnotes

[1] While Puerto Rico is a territory of the U.S., in many respects, such as competition in the Olympics every four years, it takes great pride in its Hispanic heritage. Spanish remains the primary language of Puerto Ricans.

[2] These two projects were completed and a new building was being constructed to house a School of Law and a Graduate Business Program as of May 2004.

[3] The business literature is filled with numerous suggestions that argue that successful implementation of a new program or strategy requires leadership.

[4] The names of these individuals have been disguised to respect their privacy.

[5] The lead author exchanged e-mails with Jose for about a six-month period. Jose also served as his unofficial host during the May 2004 visit.

[6] The individual who left the university provided a timetable for creating the program at the university. This timetable is shown as Table 1. It has not been formally adopted by the university.

https://digitalcommons.sacredheart.edu/neje/vol8/iss1/1

[7] The best-selling textbook, Small Business Management, by Longenecker, Moore, and Petty, is published in Spanish by Thomson/South-western. A copy was provided to the program director during the visit in November 2001 as a gift.

[8] We looked at the programs at five universities that have been recognized by the United States Association for Small Business and Entrepreneurship (USASBE) for their undergraduate programs in entrepreneurship. Clearly, other programs are also quite exceptional, but these programs were selected due to their special recognition.

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From the Practitioner's Corner

Everything You Always Wanted to Know about IPOs* *But Were Afraid to Ask

Joseph E. Levangie

Many entrepreneurs want to reach high to the heavens to achieve unlimited success. These hard-working, often underappreciated, venturers often crave fame and fortune as they strive to create their personal business legacy. One strategic path many have wandered down is that of the Initial Public Offering (IPO), whereby shares of the company are sold to the public. The IPO has many strong attractions. Large amounts of capital can be brought into the company. The company's stock can be used as currency to acquire other companies. Early investors realize a good ROI. Employees can perceive real value in their stock options. Customers, banks, vendors, and other stakeholders pay more respect to the company. Is this truly the entrepreneur's nirvana? Or is it a case of "Be careful of what you wish for because it may really come true?" Read on.

Entrepreneurial graybeards like myself are often asked, "How do you really get an IPO done, from start to finish?" In my typically charming way, I grunt and say, "It's far too complex to address casually in a few minutes!" While the response is accurate, it is also unfulfilling to the questioner. Not totally insensitive to my obligation to share and mentor, I have grappled with how to craft a satisfactory construct to address and communicate important IPO issues.

An initial trigger point occurred recently when I read the obituary (Martin 2004) of Jimmy Ling. Many middle-aged business aficionados will recall Ling as the once-dirt-poor Okie who took public his small electrical contracting firm in the 1950s and proceeded to buy first Temco Electronics and Missiles Company and then Chance Vought, Inc., forming the Ling-Temco-Vought Corporation. Known as LTV, the growing conglomerate gobbled up companies in an acquisition frenzy. I remember that as a first-year MBA student at a well-known Eastern business school in the late 1960s, I attended a guest lecture where Ling explained how he bought Wilson & Company and immediately spun off or "redeployed the assets" of Wilson's meat packing, sporting goods, and pharmaceutical operations. Tested critically by tenured professors of finance, this high school dropout scored debate points at every turn. The Q&A session was dynamic. His description of the Wilson deal as "meatballs, golf balls and goofballs" won over the student body. Over a period of 14 years LTV grew to become the 14th largest company in the United States. All from a $738,000 IPO! While many may not recall Jimmy Ling, most should marvel at the catalytic effect that his miniscule IPO had on his ensuing business dealings. This Ling case study undoubtedly planted the seeds for my interest in IPOs.

Continuing to be held hostage to reminiscences of my youth, I then hit upon a second trigger. I recalled the name David Reuben. In the arena of self-help literature, his 1972 book—titled remarkably similar to this article's, substituting "sex" for "IPO"—sought to represent for sexual education what Dr. Spock's books were for baby care. Addressing a broad and complicated (?) subject area, Reuben employed a Q&A format to transition from topic to topic. If I can borrow from his book's title, then adapting his formatting style cannot be that much more egregious! Further, certain parallels between sex and IPOs are evident. Both subjects involve a degree of self-actualization, hard work, nurturing of relationships, romancing, and performance. If successful, both can be fun and rewarding. Both endeavors can be undermined by deadly sins—lust and greed (it is left to the reader to determine which sin relates to which topic!).

Accordingly, with a series of posed-issues/practical-answers, and with illustrative real-world case examples, I will apply my personal observations from more than a dozen IPO experiences to address the following subtopics:

- *The Big Turn On.* Why would an entrepreneur/CEO consider an IPO?
- *The Wooing Process.* What kind of issues must be considered and relationships developed to reach an IPO go/no go decision?
- *Planning the Big Event.* What's involved in implementing a successful IPO?
- *The Honeymoon Period.* How can the short-term euphoria of an effective IPO be translated into long-term success?
- *Interference from Pesky Third Parties.* How does the newly public company deal with all the regulators?
- *Keeping It All Together.* What challenges to the public company present themselves over the years?

The Big Turn On
Why Does an Entrepreneur Consider an IPO?

The very mention of "IPO" connotes the big leagues. You can operate quietly as a "very nice" private company in a New England suburb, but if your firm is public, then your distant relatives and old classmates can read about you in the finan-

cial pages. Your barber, priest, and kids may look at you with renewed respect. Anticipation of this opportunity for self-affirmation can be the psychological hook for the entrepreneur to pursue an IPO.

The practical hook is cash. If company cash is low, the need for capital is high. As P. J. O'Rourke (2001) noted, "You can't put your Visa bill on your American Express card." Just before my first IPO, the company's trades payables were at 170 days. A vendor in the lobby opened his briefcase to show off a revolver (not a banking facility, but of the shooting variety!) and all purchases were on a COD basis. The bank was thoughtful enough to send out a "work out" guy to straighten out matters and baby-sit its $1.5 million loan. At 6-foot 4-inches, 280 pounds, Mr. Work-Out looked like and growled like a nose tackle for the New England Patriots. He strongly implied that he liked to hurt people recreationally. Post-IPO, of course, all these folks—now fully paid off—became our "best friends." The IPO provided liquidity and short-term sanity.

Even if you have adequate cash to sustain operations, there's always an appetite for more cash. Virtually every company has a robust wish list of investment opportunities and business development initiatives. Any CEO who sips from the entrepreneurial Kool-Aid cup seeks growth. Growth, however, is not a sure thing. Florian (2004) reports on a Bain & Company study that shows that of the 8,000 companies surveyed, only 9 percent had grown revenues and profits during the past 10 years at a rate of more than 5.5 percent and earned their cost of capital. The abiding hope is, however, that good ideas, good marketing and sales, good execution and cash launch a successful growth initiative. In the IPO prospectus, for example, investors examine the Use of Proceeds section to see how the capital infusion will be allocated and will contribute to the company's growth plan. Investors, brokers, and stock analysts enjoy imputing the upside leverage that the IPO funds will have on the company's performance. Investors analyze the company's current status and make judgments on its presumably rosier future.

Are There Noncash Considerations to Pursue an IPO?

Indeed. Investor liquidity can be key. In one of our most successful IPO deals (current market cap approaching $3 billion), the company's newly appointed CEO did not want to go public. He may have been embarrassed that he had been fired from his two previous VC-backed deals and that this ignominy might be publicized in the prospectus. Some of us, however, viewed being canned by a VC as a badge of honor! Certainly of more importance was the desire of the three MIT Ph.D. founders and their early investors to have available to them an exit position for liquidating their shares. The majority ruled and the IPO went forward. The company prospered beyond all expectations. The need for investor liquidity arguably accelerated the company's sales and profit growth despite management's early resistance.

Another wrinkle to the exit position is the curious phenomenon that the very act of filing for an IPO can attract M&A bidders and enhance the company's value. In just one month last year (Hibbard 2004), the following M&A transactions occurred out of the IPO pipeline:

- AOL bought Advertising.com for $435 million,
- Bob Evans Farms paid $182 million for Mimi's Café, and
- Allied Capital bought Financial Pacific for $94 million.

How about Noneconomic Considerations?

As Kermit the Frog says, "It isn't easy being green." Sensitivity to issues of society and nature is obviously a worthy objective and represents a hot button for many "enlightened" investors—as long as there are adequate economic underpinnings. Consider Tom's of Maine, which seems to have mastered the art of balancing its idealistic values with the realities of mass-market retailing (Donahue 2004). From selling toothpaste in mainstream stores 20 years ago, Tom's now peddles more than 90 all-natural products through a full gamut of distribution channels, including health food stores and big chains. With $40 million in revenues, Tom's pays its employees a 15 percent premium over market and contributes 10 percent of pretax profit to charity. It targets the estimated 13 percent of the population that embraces socially conscious values. If and when Tom's opts for an IPO, it should have a reservoir of highly interested investors.

Banham (2004) reports on the trend that more and more firms are choosing to operate with a corporate scoreboard that tracks not only economic, but also environmental and societal benefits. This is a concept that the people—who coin such terms—dub "sustainability." In response, it is estimated that half the investment houses around the world offer their clients a socially responsible investment option. The amount of socially responsible capital has grown from some $100 billion in the early 1980s to $2.2 trillion in 2004. There's a Dow Jones Sustainability Index that publicizes the top 10 percent of socially conscious companies worldwide. Increasingly, companies strive to be on this Sustainability A-List. Sustainability motivated companies may well benefit from an IPO so that they can participate more fully in this competition to be a good corporate citizen. Good intentions to project a healthy, green, or do-gooder image, however, can regrettably be compromised by ill-considered management behavior. Barker (2004) and Cowan (2005) report that in December 2004 Herbalife, a direct-marketer of dietary supplements to ease stress and anxiety—using ingredients with marvelous names like jujube, ashwagandha and passion-

flower—completed an IPO valuing the company in excess of $1 billion. While the prospectus acknowledged the death of founder Mark Hughes in 2000, it failed to mention that it was a controversial consequence of a four-day binge of alcohol and antidepressants. Not the desired "company image," negative publicity resulted. Alas, he who lives by the sword of sustainability …! It is probably no coincidence, therefore, that the IPO was priced below the low end of the Securities and Exchange Commission (SEC) filing range.

Is There a Market for IPOs Anymore?

The IPO market is undeniably cyclical. Despite Jimmy Ling's impressive IPO-driven success in the 1950s and '60s, during the '70s runaway interest rates and other economic factors mitigated against any serious IPO activity. In contrast, you would have to be in a deep coma not to be blown away by the prolific IPO activity from 1983 to 2000. With the new millennium, the IPO pendulum swung dramatically back to the "drought" setting. The IPO pipeline dried up. We are now five years removed from the bursting of the Internet bubble. Investors are still recovering. Lim (2005) reports that while broader measures like the Standard & Poor 500 blue chip index and the Dow Jones industrials have made up their substantial losses, the NASDAQ is still down 60 percent and 3,000 points from its March 2000 high of 5,048. The problem is that the NASDAQ index is capitalization weighted; big stocks (e.g., Microsoft) have not recovered as much as smaller stocks. This statistical anomaly shrouds the positive trends of the small caps.

Perhaps a more insightful analysis of the attitudes of investors toward the small caps (Syre 2004) is to examine the Russell 2000 small stock index, which has had a total return of 65 percent since 2000, compared to the large company Russell 1000 index, which has risen only 9 percent. One might argue that this performance sets a favorable climate for IPOs. How has the IPO market responded? Here are a few facts of note (Rivlin 2005):

- In 2004 there were 242 IPOs, nearly equaling the combined total of the previous three years.
- A blended return on investments in all 2004 IPOs would be 21 percent.
- Four out of 10 2004 IPO companies were losing money, compared to 74 percent for IPOs in 1999–2000.
- Forty percent of the 2004 IPO companies had annual sales under $50 million.

There will, of course, be IPO market opportunities in 2005. There is a glimmer of hope for the entrepreneur-CEO. With influences like ego and cash at play, an IPO can be alluring. As an overworked, underpaid entrepreneur, if you want to be seduced, you can always find one or more good reasons to be turned on by the prospects of pursuing an IPO.

The Wooing Process

What Factors Should a Private Company Consider before Taking the Big Step into an IPO?

Going public is one of the most important events in a company's life. As a method of raising capital, the IPO has served American business remarkably well. Most large U.S. companies and many smaller, vigorous companies with strong growth momentum have chosen to sell shares to the public. Companies can raise considerable capital at attractive valuations.

The IPO decision requires careful consideration. IPO capital raised can be the valuable lubricant for the organizational engine: working capital, plant and equipment, marketing, R&D, debt retirement, and M&A transactions. Going public, however, goes far beyond just raising capital. Even when it is the best option, it is always a mixed blessing. For a start, the company will give up the privacy and autonomy it has previously enjoyed. Management's freedom of action will be curtailed as outside investors hold the company accountable for performance. The company will be required to disclose important information to all the world, including its competitors.

The seductive allure of pursuing an IPO wanes quickly when the company's CEO and CFO perform some rudimentary due diligence. The journey down the IPO trail, they learn, can be a brutally difficult process often exceeding their worst fears. It is not a trip for the lazy, guilty, or incompetent. Even the most seasoned entrepreneur may be stunned by the vicissitudes of the financial marketplace. Due diligence may reveal that many public offerings fall below expectations or even fail for a variety of reasons:

- The offering can run into *bad stock market dynamics.* I once received a "firm commitment" IPO letter from an underwriter on the same day that the Dow lost about 7 percent of its value in three hours—the "firm"-ness of the deal was delayed by 10 months.
- The *auditors* can restructure the company's accounting conventions and reclassify costs to cause a huge negative earnings hiccup that can torpedo the IPO. During my first IPO, I learned this difficult lesson. Thankfully, I was able to negotiate enough offsetting items to keep the offering alive.
- Other companies of which I was aware had *profit downturns* during the IPO pursuit, and irretrievably lost their IPOs.
- Another company I knew had the misfortune to endure a six-month delay because the underwriter wanted the company to reconstitute and upgrade its *Board of Directors.*

The company must clearly weigh all the pluses and minuses to the IPO decision.

What Are the Advantages of an IPO to a Small Company?

The factors influencing a "go" IPO decision are straightforward: money, currency, motivation, prestige, and liquidity.

- *Improved Financial Condition.* The sale of shares to the public brings in capital that does not have to be repaid, thereby immediately improving the company's financial condition. This improvement may allow the company to borrow money at more favorable terms. Moreover, if the initial stock offering is successful and a strong aftermarket develops, the company may be able to raise more capital by selling additional shares - at presumably a higher valuation.
- *Using Stock for Acquisitions.* Once the company is publicly traded, it can issue additional shares. This capacity to mint new currency, despite its potentially dilutive effect, can serve to fuel an active M&A program. Many newly public companies choose to acquire other firms to accelerate their growth plans.
- *Using Stock as an Employee Incentive.* Companies frequently offer stock incentives, such as stock options, stock appreciation rights, or stock bonuses to attract and retain key personnel. While the audit and tax treatments of such incentives are becoming increasingly severe for the company, these arrangements nevertheless tend to instill in employees a healthy sense of ownership and the hope for capital appreciation. .
- *Enhancing Company Prestige.* One of the intangible, but widely recognized, potential benefits of going public is that the company becomes more visible and attains increased prestige. Through press releases and other public disclosures, and through daily (and real-time) listings in the paper and over the Internet, the company becomes better known to the business and financial communities, to investors, to the media, and even to the general public. While both good and bad news must be disseminated to enable investors to make well-informed decisions, the public company that is well run and compiles a record of good performance can gain a first-class reputation. As the company's name and products and services become better known, not only do investors take notice, but so do customers and suppliers who often prefer to do business with well-known companies.
- *Investor Liquidity.* Early investors are concerned about their exit strategy. An IPO helps to resolve this issue.

What Are the Disadvantages of an IPO to a Small Company?

For each and every one of the successful IPOs in which I've been involved, there have been certain well-intentioned cynics who launched warning flares on how truly dumb an idea our IPO pursuit was. Their objections, which our companies weren't bright enough to heed, were nevertheless worth consideration. In the end, we succeeded where others may have failed. Indeed, for certain ill-prepared companies, for some inexperienced management teams, or for some just plain bad deals—such critique may have merit, and be worth heeding. For example:

- *Loss of Privacy.* Of all the transformations a company undergoes when it becomes public, probably the most troublesome is the loss of privacy. When the company shifts from private to public status, it is required to reveal highly sensitive information, such as compensation to key executives, special incentives for management, and many of the plans, strategies, and capital investments that underpin the company's future direction. Such disclosures are required for the IPO Registration Statement and subsequently on a continuing basis with the quarterly (10Q) and annual (10K) reports.
- *Limiting Management's Freedom to Act.* While the management of a privately held company is generally free to act by itself, the management of a public company must obtain the approval of the board of directors on certain major matters. On special issues, the company must even seek the consent of the shareholders. Clearly "going public" translates into diminished management flexibility. Further, shareholders are mostly distant and unsympathetic. These public owners of the company judge management's performance in terms of earnings, share price, and dividends. Public shareholders may exert pressure for the company to increase earnings and pay dividends each quarter. Such pressure may cause management to emphasize short-term considerations over long-term goals.
- *The High Cost of Going Public.* The costs of an IPO are substantial and can be categorized into three classes:
  - *Managed Costs*
    1. *Audit expenses* are a function of how well the company's financial systems and accounting department hold up to third-party scrutiny. With the audit industry shake out and consolidation and with increased regulatory oversight arising from Sarbanes-Oxley (Sarbox), auditing firms are charging increasingly higher fees, and companies are tolerating the scrutiny a lot less. Twenty-eight-year-old senior managers—*not* partners—of a large auditing firm charge as much as $275 per hour! The number of hours to reconstruct unaudited reporting periods and/or to restructure the financials to GAAP standards can be exorbitant. Depending on how adequate the company's financial records are, the IPO auditing bill can be $125,000 to $350,000.

ii. *Legal expenses* are a function of how smoothly the IPO process proceeds and how complex the company's contracts, due diligence list, and intellectual property issues are. Further, the quality and accuracy of company input to the writing of the IPO Registration Statement can help or hinder the process. I had one CEO fight the attorneys every step of the way. The law partner told me that this stubborn behavior doubled the legal tab! With 25-year-old law school grads being hired by Boston law firms at $130,000 (plus a $25,000 bonus), the legal bill can escalate. Plan on at least $200,000 to $450,000 for the IPO.

iii. *Printing costs* are a function of the number of copies of the prospectus (the finalized Registration Statement) distributed to subscribers of the offering. Years ago, dinosaurs like me worried about setup costs (print in molten lead) and expensive last-minute changes. The printing costs are better contained these days with electronic files, but the prospectus tab still can be $50,000.

iv. *Road Show expenses* are determined by how many venues the company presents itself to investor audiences, in how many cities, and with how many company executives supporting the presentations. A highly polished dog-and-pony show is not just nice to have, but an absolute requirement to play IPO Pursuit. Budget $20,000 to $40,000.

v. *Director and Officer (D&O) Insurance* is protection for the BOD and company management regarding potential litigation arising from public representations. The cost of D&O insurance varies, but can range from $100,000 to $750,000 per year.

- *Semi-variable and Variable Costs*
  i. Blue Sky fees. These fees are dependent on which states the underwriters want to sell shares in; state-by-state registration ("Blue Sky") fees are incurred. Such fees have increased, on average, about 3 percent over the last five years. Budget $10,000 to $15,000.
  ii. SEC filing fees. The SEC needs to pay for its in-house legal and accounting staffs which review the Registration Statement. These fees have stayed relatively stable over the last five years. Budget $10,000 to $15,000.
  iii. Underwriter fees. In a combination of cash and warrants, budget 6 to 9 percent of the gross proceeds of the IPO.

  - *Disruption Costs.* On a case-by-case basis, the CEO/CFO can impute the lost time associated with key personnel being sidetracked from their normal duties to support the IPO effort. This is an opportunity cost, not an accounting cost, but certainly can have a serious economic impact on the company. Pick a number.

- *Loss of Control.* In past articles of the *New England Journal of Entrepreneurship* (Levangie 2003), I have discussed in detail the emotionally laden issue of management's perception of loss of control and dilution of ownership. Owners of private, closely held companies always have a problem with "giving away a piece of their baby." My typical big-picture response to such equity paranoia, read from the Book of Business Clichés, is that a smaller slice of a much bigger pie is generally worth a lot more than a larger slice of a smaller pie—sort of a pizza philosophy! The MBA approach, of course, is to employ a really neat chart. Table 1 depicts in gory detail a simple equity model that portrays a "generic" company from start-up through the IPO. In this illustration, the entrepreneur-CEO's personal equity position starts at 65 percent of the company, with an imputed value of $2.275 million. Growing the company through a series of private capital raise-ups, the CEO can retain a pre-IPO ownership of 34.7 percent, with an imputed value of $6.035 million. Post-IPO, the CEO still owns 27.1 percent (arguably "effective" control" of the company) with an imputed value of $16.747 million.

What about Structural Ways to Assure Control after the IPO?

For incorrigible control freaks, there is available the concept of "dual-listed" companies. These are entities in which regular stockholders own shares that typically entitle them to dividends and other benefits, but with limited voting rights. At the same time, there is generally a small number of shareholders who control the company with supervoting stock. These really "super" shares may have x-to-one voting power, where x can be 10 or more. I was introduced to this concept three decades ago when An Wang (and later his son Fred) controlled Wang Corporation with a dual-listing structure. Serwer (2004) reports that from the 1920s until 1986, the NYSE did not allow dual-listers to be on the Big Board; these entrepreneurial or family-owned firms turned to Amex and NASDAQ. According to the IRRC, a corporate governance research firm, more than 11 percent of the 2,000 companies it presently tracks are dual-listed. Examples: newspaper firms like Dow Jones, the NY Times and the Washington Post; media firms like Comcast, Adelphia and Viacom; and industrial firms like Ford, Coors and Tyson Foods. Google, in its clumsy Dutch-auction

Table 1. Simple Equity Model

[Co. Valuations in $000s]

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, No. 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

IPO that Levy (2004) describes as "inspired by Inspector Clouseau" (improper share distribution to employees, confusing explanations of the auction procedure, initial overpricing that scared investors away, and the ill-advised *Playboy* interview that probably violated the SEC's pre-IPO "quiet period") opted for dual-listing. It is not a huge surprise, therefore, that proxy advisor Institutional Shareholder Services recently rated Google's corporate governance worse than any other firm in the S&P 500. A significant governance issue is: "How can a Board of Directors tell management how to act when management's super votes can kick out the BOD?"

Who Makes the Company's "Go" Decision on the IPO?

The decision authority to pursue an IPO ultimately resides with the Board of Directors of the company, on behalf of the company's shareholders. If the CEO-entrepreneur is still the majority shareholder, the IPO decision is, of course, more concentrated in one person. In any case, the rewards v. the costs, the positives v. the negatives and the limelight v. anonymity must all be weighed. Is the business model right? Is there an organizational will to "go to the next level" Is the decision-making balanced? The entrepreneur should not

bravely jump at the IPO opportunity like Evel Knievel. Correspondingly, management cannot proceed with cold feet. Much akin to a couple contemplating matrimony, the company must be willing to embrace with open eyes a sea change of life-altering new relationships and responsibilities.

The practical aspect of the IPO Pursuit is the significant "ante-up" money needed to play the game. A stake on the order of $1 to 2 million is required to pay IPO front-end expenses, including the accountants and lawyers. In several IPOs, I've had occasion to arrange private placements of bridge loans that provide investors with above-market interest rates and warrants. The bridge loan can be exciting. In one IPO, five of us on my residential street provided the entire bridge loan, using our houses as collateral. I shudder to think what would have been the local real estate fallout if the IPO had not been successful!

As one experienced practitioner, I underscore the enormity of the IPO decision. In many cases, the company is betting its entire business. Yet even with failure, some good (merger or consolidation opportunities) might arise. The spirit of the IPO go-forward decision, however, has to be to get the offering done. As Kepner (2004) cites from "Gnomologia" (circa 1732): "All things are difficult before they are easy."

Assuming the BOD Agrees to Pursue an IPO, What Relationships Must be Developed?

The "Wooing Process" requires a coupling of parties. The IPO candidate must find an investment bank that underwrites IPOs and will listen to the company's story. Firms are available to hold the company's hand in IPO matters. For example, Ardour Capital Investments, a young NYC investment firm (on whose board I serve), gives clients advice on such issues. Ardour (Dukes 2005) advises that investment bankers, long deprived of lucrative IPO fees, are preparing for a significant surge in IPO underwriting revenue in 2005. The investor bankers' enthusiasm for IPOs is reinforced by venture capitalists who have portfolios of companies—some of which may be IPO candidates—and who are eager to see the IPO market open up to liquidate some of their investments. The robustness of the IPO market recovery can only be helped by bringing high-quality, seasoned companies to market. It is envisioned that most IPO candidates will be profitable with proven business models. On the heels of this anticipated IPO resurgence, there also may be some IPO candidates that are unprofitable, but which are market-leading companies or those possessing ground-breaking technologies and/or environmentally safe replacements for existing technologies. Companies may be addressing certain sectors which are of interest to particular investment banks— alternate energy, biotech, Internet, etc. Common interests can often reinforce a budding relationship between the underwriter and the company.

Asher (2004) points out that the financial services industry is in a sustained state of flux. First, there are the megafirms resulting from industry consolidation. These global firms have downsized their investment banking operations and have not yet determined whether it makes economic sense to service the middle market of emerging growth companies. And if these megabanks do reach out to smaller IPO candidate companies, how do they generate enough fees to cover their overhead?

The large investment banks dominate IPO activity. Gullapalli (2005) reports on some Thomson Financial statistics chronicling 2004 IPO Underwritings:

Manager	Amount ($B)	2004 Market Share	# of Issues
Morgan Stanley	7.3	16.3%	21
Goldman Sachs	7.1	15.8	29
Merrill Lynch	4.5	10.1	31
JP Morgan	4.0	8.8	25
Citigroup	3.6	8.1	19
Credit Suisse First Boston	3.6	8.0	23
Friedman Billings Ramsay	3.1	7.0	19
Lehman Brothers	2.4	5.3	20
UBS	2.3	5.1	20
Banc of America	1.5	3.3	16
Top Ten Totals	**39.4**	**87.8%**	**223**
Industry Totals	**44.8**	**100.0%**	**233**

In New England, long-time investment banking supporters of the technology sector—Alex. Brown, Donaldson Lufkin Jenrette, Robertson Stephens, and Hambrecht & Quist—have been gobbled up by the global megafirms. Accordingly, entrepreneurs' access to investment bankers (IBs) to discuss IPOs has become that much more restricted. Other IBs include Bear Stearns, SG Cowen, and US Bancorp Piper Jaffray.

Most of the low-end IBs, which typically were production houses for cookie-cutter, smaller value IPOs in the 1988–1999 period, have involuntarily left the industry. A substantial void in the market now exists for IPO offerings of less than $35 to $50 million.

To establish a relationship with an underwriter, an IPO candidate generally needs a referral and often some friendly handholding. I know of dozens of companies that went solo, knocking on investor banking doors, up and down the Street. Much akin to a Fuller Brush salesman, these enthusiastic cold-callers all got the "bum's rush!" Referrals to IBs are critical. Referrals can come from venture capitalists, obviously if the company is in the portfolio or, in some cases, if the company is a friend of the VC firm. Another source of help is the referral that comes by way of regional financial service firms.

The top eight VCs in New England, ranked by investment dollars for the period July1, 2003 to June 30, 2004, as reported by McBride-Bey (2004), are:

1. Polaris Venture Partners
2. Highland Capital Partners
3. Healthcare Ventures LLC
4. Atlas Venture
5. Kodiak Venture Partners
6. Charles River Ventures
7. Battery Ventures
8. Prism Venture Partners

Hand-holding advisors catering to New England companies include:

- Adams Harkness & Hill
- Ardour Capital Investments
- Capstone Partners LLC
- Covington Associates
- Downer & Co.
- O'Conor Wright & Wyman
- Shields & Co.

Referrals for underwriters can also come from lawyers and accountants. More on this below.

Planning the Big Event

Now that There's BOD Approval for an IPO and an Acknowledged Need to Develop Investor Banking Relationships, How Can the Deal be Closed?

Prayer and spiritual supplication wouldn't be a bad start. The company will need all the help it can muster. The best approach is for senior executives to take adequate time and thought to organize for the Big Event. I firmly believe that every hour of serious planning invested on the front end will help avoid a full day of delay on the back end. Once the pace of the IPO quest accelerates, the company can become a frenetic madhouse. The CEO and CFO must assure that there are systems in place to: absorb the emotion and confusion of a panic-stricken staff; respond to requests for "unavailable" information; and support an almost endless series of forms, contracts, disclosures, and financial analyses.

In short, the IPO game plan follows this outline:

- Assemble the IPO team, including the legal and audit firms.
- Address countless housekeeping items.
- Translate the company's business plan into an IPO "selling document" or brochure on why the company is "so darn good."
- Through the recommendations of advisors and other referrals, develop a contact plan for prospective underwriters.
- Interview underwriters and stimulate IPO interest in the company.
- Select an underwriter (or in many cases, be lucky enough to be selected by an underwriter).
- Execute the writing of the Registration Statement (preliminary prospectus).
- Perform well on the "Road Show."
- Negotiate the pricing of the IPO deal.

What IPO Advisor Is Most Important?

The company's securities attorney is a central player. Teamed with the CEO and CFO, the company's outside counsel helps the company walk the thin line between putting forward the best face of the company throughout the prospectus, while protecting the company's backside against potential litigation. I would seek an attorney with most, if not all, of these traits:

- Is intelligent and a quick study;
- Knows the company's business and people;
- Has extensive IPO and SEC-related experience;
- Is a good, simple and fast writer;
- Listens more than lectures;
- Has a "can-do" attitude;
- Worries problems to death, but in a positive, constructive way;
- Has a sufficiently pleasant personality to establish good chemistry with the underwriter and underwriter's counsel;
- Is essentially unflappable in the face of the inevitable clashes of Type A+ egos, and deflects these battles with *le mot juste* and some self-effacing humor; and
- Is more concerned about IPO success than billable hours.

Where do outstanding candidate lawyers reside? Unfortunately, this is no longer a straightforward issue. The legal landscape of firms servicing the entrepreneurial/corporate community has undergone substantial changes in recent years, no doubt due to the bursting of the Internet (technology) bubble in 2000. In the Boston area, for example, the following old-time firms were impacted (Blanton 2005):

- Warner & Stackpole (est. 1874) merged into Kirkpatrick & Lockhart.
- Peabody & Brown (est. 1854) merged into Nixon Peabody;
- Bingham Dana (1890) merged into Bingham McCutchen;
- Hutchins, Wheeler & Dittmar (est. 1844) merged into Nixon Peabody;
- Hill & Barlow (est. 1895) closed;
- Hale and Dorr (est. 1918) merged into Wilmer Cutler Pickering Hale and Dorr; and in 2005
- Testa Hurwitz & Thibeault (est. 1973) closed.

This turbulent law firm climate has created a series of relationship upheavals involving large numbers of law partners and associates changing firms. This unprecedented turnover complicates the company's decision in selecting outside counsel. In many cases, the company already has an excellent law firm that, with a little jump-starting, can support the IPO effort. The more difficult scenario is when inadequacies in the company's current law firm dictate that a switch to a more

full-service, more SEC-oriented law firm is required. Thankfully, there are many dozens of firms in New England that can do competent IPO work. They range from the megafirms, such as Ropes & Gray and Mintz Levin, Cohn, Ferris, Glovsky & Popeo, to boutiques, like Morse, Barnes-Brown & Pendleton ("The Business Law Firm on Route 128"). The trick is to find the right person inside the law firm. In many cases, this individual may also be an excellent source of investment banking referrals.

What about the Auditing Firm?

The key to the accounting challenge is to find an audit firm which is well versed in the particular nuances of the company's industry, and experienced in IPOs and SEC filings. If the company's books are still being kept by the entrepreneur's brother-in-law, then there's a big problem. There may still be a dicey problem if the company's competent audit firm is wary of a new publicly traded client. In the post-Enron era with the confining regulations of Sarbanes-Oxley, many audit firms are weighing very conservatively their own partnership's risk-reward trade-offs. Rather than be client-oriented, many audit firms have adopted a standoffish stance. As a result, many smaller—and presumably riskier—audit clients are being driven away by escalating fees and inhibiting audit policies, including "qualified going concern" opinions regarding the projected ability of marginally profitable, fast-growing companies to continue operations over a 12-month period.

Audit industry consolidation has exacerbated the accounting dimension of the IPO challenge. What used to be the "Big Eight" is now the "Big Four:"

- PricewaterhouseCoopers
- Ernst & Young
- Deloitte & Touche
- KPMG

Arthur Young, Touche Ross, and Coopers Lybrand have been subsumed into competitors. Arthur Andersen has closed down. Accordingly, the movement of CPAs to other firms has caused major discontinuities in what was previously a stable industry. Audit partners with whom I teamed in past IPOs are now in new firms with different client selection criteria. Some frustrated CPA acquaintances are simply not in the business any more. Nevertheless, there are several good second-tier national and regional firms in New England addressing the middle market including:

- Grant Thornton
- BDO Seidman
- Wolf & Co.
- Brown & Brown

With the right audit firm and the right audit partner, the various accounting tasks associated with the IPO can be almost tolerable. Don't expect much in the way of investment banking referrals from the CPAs these days since their worries of partnership liability outweigh any inclination to help clients with capital raise-ups.

What Corporate Housekeeping Issues Need to be Addressed?

After the company makes the IPO go-forward decision and brings in the appropriate legal and audit advisors, the CEO and CFO should consider the steps needed to facilitate a crisis-free transition from private company to public company. Certain corporate housekeeping items may need to be cleaned up, and it must be determined whether the necessary information is available to resolve outstanding issues. Among possible housekeeping items are:

- Should the company's capital structure be revised? The company may want to simplify it by exchanging common shares for preferred stock or special classes of common stock.
- Does the company need to authorize additional shares of stock to complete the IPO and for future stock offerings and anticipated M&A activity?
- Should the stock be split in anticipation of a more marketable share price?
- Should affiliated companies and other related entities be consolidated to create a more attractive IPO package for public investors?
- Should the company consider a name change? Certainly if the current name is akin to "Acme Technologies," then perhaps a rebranding is in order. Five years ago companies felt anything was OK—say, StupidInvestment.com! My branding bias is toward names that suggest what the company actually does. Few know that the company formerly known as Arthur Andersen Consulting is Accenture. Company names such as Blockbuster, Palm, and Subway are much more memorable.
- Does the management team need to be pruned and/or upgraded? Can the CEO stand up to a national audience of business critics? Is the CFO just a good accounting manager or can he or she competently "market" the company to the financial community? Does the sales and marketing person really know the customers and distribution channels? How deep is the management bench?
- Does the Board of Directors membership need to be upgraded? In this time of increased regulatory oversight, such a task is nontrivial. Many qualified candidates decide not to join public BODs. While I was on five public boards—simultaneously—10 years ago, I am now on just one public board today. With the need for increased corporate governance, the workload for a director has escalated, and the liability has also risen.
- Does the BOD need to amend the company's articles of incorporation or bylaws? The company may need to clean

up certain voting provisions or set up BOD committees, such as an audit committee.

- Here's one item that unbelievably comes up far too often to even be amusing: Does the company have a complete shareholder record? One really doesn't want a scene out of *The Producers* in which 300 percent of the company's equity has been committed!
- What is the state of BOD and management transactions? Are such dealings appropriate for a public company? Are there any overpaid, flagrantly underqualified relatives on the payroll? Does the company pay for the CEO's cottage at the shore? A sensitive section of the Registration Statement is "Related Party Transactions."
- Have all appropriate material and management contracts been drafted and signed? Is there a stock option plan for employees?
- Does a physical inventory have to be taken? In one of my IPOs, there was—simultaneous with the IPO—a planned acquisition of an old-line company whose extensive product lines had zillions of little parts. The target company had never taken a physical inventory count. Before proceeding with the IPO, we had to commission a "forensic" audit firm to recreate and impute historical inventory levels to develop auditable financial statements.

Which of These Housekeeping Items Is Most Important?

While the failure to accomplish everything on the housekeeping list is a sure ticket to Blown-IPO-ville, I consider the BOD recruitment issue the most difficult. As part of Sarbanes-Oxley's new corporate governance standards, the national securities exchanges have mandated that:

- Audit committees be composed entirely of independent directors.
- Companies must disclose whether their audit committee contains a "financial expert."
- The audit committee have extensive authority to select and oversee the company's independent audit firm.

Issues of BOD independence and financial "literacy" under Sarbox have come into prominence. The challenge for the company's shareholders, for the current BOD, and for management is to identify and recruit qualified BOD candidates. What due diligence is required in this challenge? Pose questions like the following:

- What's the skill set and business experience of the candidate? Is this person complementary to the existing board?
- Does the candidate adhere to the highest ethical standard?
- What about the Sarbox concern for financial literacy?
- How difficult will it be for the candidate to attend scheduled meetings and carry the workload?
- Will new BOD personalities mesh with existing BOD personalities?
- Are there any hidden-agenda motivations at play? Any potential or perceived conflicts of interest? Are board candidates incentivized only by BOD fees or are they geared to tackling challenging strategic issues and making problem-solving contributions to the company's "team?"

BOD members are experiencing more and more constraints. As the old joke goes, "What's the difference between a BOD member and a shopping cart? The shopping cart has more flexibility, and the director holds more food!"

What Does the "Selling Brochure" Look Like?

If the company is truly serious about an IPO, then it should already have a thoughtful, comprehensive business plan. My experience suggests that a short, simple, and alluring one-page summary of the company is necessary to open the door to investment banks. Assume that with busy investor bankers, you have 30 seconds to create interest. Discuss succinctly and brilliantly:

- Why the company is the "best of the best" in its "space."
- How the company's products and service beat out the competition.
- Who their blue chip customers are.
- What industry trends tend to reinforce the company's rosy market projections.
- What the use of proceeds will be, and how additional IPO resources will make a difference.
- What is the company's key intellectual property and how is it protected.
- Who is key management.
- What critical strategic alliances are in place.
- What are other innovative approaches and strategies that make the company interesting to potential public investors.

For meetings with IBs, back up this one-pager with an 8- to 10-slide PowerPoint pitch, with handouts, product literature, photos, and the like. All this preparation will be the basis for the subsequent road show.

If You Actually Get to Meet and Talk to an Investment Banker, How Do You Evaluate the Possible Relationship?

The poster boy for successful IPOs in the late 1990s was CSFB's Frank Quattrone. As the banker who honchoed the Amazon IPO, he allegedly drove his annual remuneration up over $100 million. In time, Quattrone got bitten by his own e-mails which purportedly showed that he was a "spinner" of IPO shares; that is, he used the much-sought-after IPO share allocation as a preferential benefit for targeted clients. Quattrone was the king of power and ego in investment bank-

ing. His criminal prosecution was based on his alleged lying to federal authorities.

In this context, the mantra "Greed is good" is, therefore, not inappropriate for the IPO Quest. Understand well that investment bankers will view the company with a primary objective in mind: How to earn very large amounts of money from fees, stock options, and trading associated with any IPO relationship that may arise. With this sensitivity to the underlying greed impacting the whole IPO process, there are many investment banking evaluation factors issues to assess:

- What role will this particular investment bank play in the offering—lead manager, comanager-middle (of front cover of prospectus), comanager-right—dependent on the economics of the IPO?
- What IPOs has the firm been involved in during the last three years, with what success?
- What is their institutional sales capability?
- What kind of retail brokerage operations do they have?
- What will the research coverage be on the company? Is the company's industry one that the firm already covers? Is the research group respected?
- What kind of investor meetings will the firm sponsor?
- What law firm will the underwriter use as counsel?
- How does the road show schedule map out? How many meetings in how many cities? To what audiences? (Institutional, retail, private clientele, etc.)
- Will there be a European component to the offering?
- What will the underwriting syndication look like? With what kind of share distribution?
- What is their stance on selling shareholders as part of the offering?
- How about "set-aside" IPO shares for company friends and family?
- What is the expectation for the (Greenshoe) overallotment option to be exercised? This can enhance the size of the offering.
- What will the schedule and location of the Registration Statement drafting session be?
- What kind of guidelines does the banker suggest regarding valuation and IPO size?
- Who in the underwriter's organization makes the final IPO decision regarding the company, when, and with what documentation?

Assuming that the Company and Its Advisors Have Agreed to Proceed with a Given Investment Bank, What's Left before Scooping up All the IPO Cash?

Actually, the real work has only just begun. First the company must support the underwriter in a road show to develop investor interest in the offering. To prepare for the series of multicity presentations, there are a few guidelines for a candidate company:

- Think through what company attributes that a prospective investor might find particularly attractive. Integrate two to three key selling points throughout the presentation. Repeat, repeat, repeat. You want the audience to walk away with the message etched in memory.
- Anticipate the five "worst" possible questions the audience might ask and thoroughly brainstorm the best way to craft responses. Be prepared to provide good facts; no BS!
- Suggest what important post-IPO events and milestones can be anticipated that might translate into high-profile press releases to the financial community and to the general public.
- Deal to the presentation strengths of the management team. If the founding technologist is shy and retiring, minimize his or her involvement. Conversely, if the marketing person treats an opportunity to perform in front of a crowd like "open mike night" at the local comedy club, think it through thoroughly and orchestrate accordingly.
- Prepare and rehearse the presentation several times. Get in "the zone." Test thoroughly all audiovisual support equipment well in advance and make sure that there are plenty of spare bulbs, fuses, batteries, and the like. Don't assume that technical support will be available on-site. On an IPO road show in Europe, I once had to buy two computers in London (they did not lease or rent them at that time). As a result, American Express thought that someone had stolen my credit card! Also, in the United Kingdom, the PAL video format (lines per inch) is not compatible with the U.S. format. Plan accordingly.
- Remember the words of Mark Twain: "It usually takes more than three weeks to prepare a good impromptu speech."

Meanwhile, the company also joins with the underwriter and their respective legal counsels to prepare the 100 or so pages of the Registration Statement. There are both lyrics (text) and music (financial data) involved. In short, an enormous workload remains to score this piece. The drafting team must:

- Prepare and present audited financials.
- Describe the underwriting arrangements and the scope of the offering.
- Discuss the risk factors.
- Analyze the use of proceeds.
- Calculate the dilution to public shareholders.
- Discuss selling security holders.
- Describe the company's business.
- Present "Management's Discussion and Analysis of Financial Condition." This section is particularly important since the SEC is really forcing management to take responsibility for intelligently and honestly representing signifi-

cant issues such as revenues, costs, expenses, profitability, working capital, cash flow, investments, and other trends important to the investor.
- Discuss the company's management and BOD.
- Disclose material contracts and related party transactions.
- Provide legal and accounting opinion letters.
- Provide exhibits of backup information deemed important by underwriter's counsel.

Miraculously, the draft Registration Statement eventually does gets completed. But not without some drama. With endless requests by underwriter's counsel for more and more disclosures, in combination with often impossible time pressures, changing market conditions, and the press of ongoing company business—tempers have been known to flare. I have initiated, broken up, and mediated a number of spats. Thankfully, there has been no loss of life.

The Initial Registration Statement is then filed, and the initial regulatory review begins. The SEC and the states have concurrent jurisdiction over the offering of securities. The Registration Statement must be filed with the SEC, with those states in which the shares may be offered, and with the National Association of Securities Dealers (NASD). The SEC's review assesses compliance with its requirements, including the adequacy of the company's disclosures. The SEC does not address the merits of the offering. Some states may consider the merits of the offering under their "blue sky" laws. The NASD reviews the filing to determine if the underwriters' compensation is excessive.

So Can Anything Go Wrong Now?

But of course. Dozens of IPO action items may be outstanding on any given day, dependent upon the several organizations and scores of people involved. Overlay this frenzy of activity with imperfect information, rigorous deadlines, and human frailties and you have a recipe for deal-threatening problems. The short list of my not-ready-for-IPO-time experiences (among several deals) includes:

- Underwriters' counsel heaping profanities on the SEC examiner in a teleconference, requiring my intervention as a diplomat—not a particular strength of mine.
- Sickness in the SEC office causing delays in the SEC review process and resulting in "the numbers going stale"—a condition requiring the auditors' review of another quarter of financial results.
- The CEO firing the VP-Marketing, requiring an organizational scramble.
- The COO suffering a career-ending stroke during the registration period.
- Two IPOs lost in the 1999–2000 Wall Street "bubble burst."
- For an acquisition targeted with the use of proceeds, additional due diligence showing such an acquisition to be a bad decision.
- For another acquisition targeted with the use of proceeds, the acquisition company's CEO dropping dead 45 minutes before closing.
- One of the three principal underwriters in the syndicate being suspended by the SEC.

Regardless of such setbacks, the secret to IPO success is endurance. Retrospectively, it's easy to be romantic about this IPO journey. Frankly, for each IPO that I have experienced, the Registration Statement trek at times has been unadulterated torture. I'm sure I would have remembered if I had had any fun! Like a marathon runner, you must stubbornly persevere. Once the company has reached the SEC review stage, there is hope. The finish line is almost in sight. Some 20–60 days after the initial filing the SEC issues a comment letter indicating those areas in which it believes the filing does not comply. The IPO team subsequently translates these comments into an amended Registration Statement, which is filed. After a series of one or more iterations, all parties become satisfied with the technical and disclosure aspects of the Registration. Next the pricing amendment is filed. The pricing amendment discloses the offering price, the underwriters' commission, and the net proceeds to the company.

Although there is technically a 30-day waiting period for the SEC to review the final Registration Statement, the company can request "acceleration" for the deal to become effective, to which the SEC typically accedes. The final prospectus is printed and distributed to interested investors. The closing occurs 3 to 4 days after "going effective," with the company issuing the securities to the underwriters and receiving the proceeds (net of the underwriters' compensation) from the offering.

By this time, everyone directly involved with the IPO should be thoroughly numb. The company's cash position, thankfully, will be much improved. And the organization should now be poised to be growth-oriented and exciting.

The Honeymoon Period

Is a Little Post-IPO Euphoria Such a Bad Thing?

Euphoria is one trait that distinguishes homo sapiens from, say, daffodils. It's a good human emotion. Exhausted and cranky, the company's management team—with the successful completion of its IPO marathon—may rightfully achieve an endorphin high. This is alright for a few days, as long as it's not a sustained high!

The CEO driving a fancy new car is to be expected. In contrast, the CEO taking a three-month vacation to Australia (which happened in one IPO I backed)—just months before the BOD fired him—is not expected and is, of course, unacceptable. Monthly management pep talks to the troops—with passing references to the company's stock performance—are generally OK. Daily posting of the share price in the employ-

ees' cafeteria is generally ill-advised. Individual obsession with (paper) net worth from the company's stock performance can only drain the energy from the organization.

Stock-watching can become a distraction, if not a disease. To cite Andrew Carnegie (Forbes 1974): "Nothing tells in the long run like good judgment, and no sound judgment can remain with the man whose mind is disturbed by the mercurial changes of the stock exchange. It places him under an influence akin to intoxication. What is not, he sees, and what he sees, is not."

Intoxication caused by IPO success is tolerable for very short periods. Business life marches on; the company's Road Show "story" needs to be implemented. There is considerable work to accomplish.

What's the Most Important Task in the IPO Honeymoon Period?

The key post-IPO task may undoubtedly be counterintuitive to many. Despite now having perhaps tens of millions of cash and cash equivalents in the treasury, the company should have as its single most important objective the discipline to conserve cash. An approach that I have developed in response to the newly public company's evaporating cash balances is to break out into concrete subtasks the major areas of expenditure in the Use of Proceeds, as disclosed in the Registration Statement. Each task—be it infrastructure for a larger capacity facility or development projects for enhanced technology or extensive marketing programs—can be budgeted and the cash secured in a virtual escrow account.

Why display such cash paranoia? Many a company emerging from the IPO experience is still populated by senior executives who are also company founders or early employees. Surviving for years on sweat and guile and occasionally smoke and mirrors, these pioneers may now be looking for tangible affirmation of their accomplishments, not gained from their "paper" net worth. Spending some "mad money" can be a psychological outlet. Perhaps an explanation resides in a sampling of some unfortunate IPO honeymoon experiences I've observed.

- A CEO/head researcher who wanted to perform strategically diversionary and expensive ($500,000) R&D improvements upon some lab equipment that was commercially available off-the-shelf ($30,000).
- A CEO who committed to oversized and expensive ($3.5 million over six years) new corporate office space before passing it by the BOD for approval.
- A CEO who requested a new hire wish list from the troops. He found out that if everyone was granted what he or she wanted from Santa, that the company's headcount would have increased by three and a half times and labor costs that would have fattened annual payroll by $12 million.

Over the years I've learned that corporate headquarters—dependent, of course, upon the company structure—can be managed efficiently with a bare bones staff—say a CEO, a small financial and administrative department and perhaps a corporate development guru. In my view, overhead begets more overhead. The company should nip its costly growth in the bud. Further, the operating business units can avoid or minimize Kudzu-like cost build-up with initiatives such as outsourcing. As reported by Thomas (2003), outsourcing has now reached the point that the company can substitute people in Manila for high-priced New York City staff to answer the customer service phone. Computer code can be written in Bangalore as competently as in Sunnyvale, California. Aetna, for example, has much of its data entry for medical claims performed by 1,400 workers in Ghana linked to the United States by a satellite Internet connection. All of this outsourcing activity can save the company plenty of cash.

How Must the Company be Managed Differently as a Public Entity?

The euphoria and the infusion of cash associated with a successful IPO come with strings attached. In transitioning from private to public company, management discovers that it has gained two new bosses—the public shareholders and the regulatory agencies. How should management respond? In theory, the answer is elegantly simple. The following guidelines need to be followed:

1. Meet or exceed revenue and earnings projections.
2. Report to the SEC quarterly (10K) and annually (10K) on a timely basis.
3. Disclose all material events (8K), including major contracts, business relationships, changes in officers and directors, changes in assets, and changes in control.
4. Communicate well with "the Street" in order for the company to become better known to the financial community and to the public.

The BOD spurs company management to fulfill its performance objectives (guideline 1). The company's lawyers (guideline 2) and auditors (guideline 3) assist the company in its SEC reporting. The task that the company is less prepared to handle is establishing a working communication with Wall Street and the public shareholders (guideline 4).

Why and How Is the Wall Street Relationship so Important?

Now publicly traded, the company has millions of shares of its stock in the hands of the public. Thousands of shares may be traded every hour. Some share holdings may be in large institutional accounts; others are held in small, individual accounts. The share price—according to Economics 101—is determined

by the marketplace's supply-and-demand impact on the company's shares. If interest in the company heats up, the share price is likely to follow suit. Interest in the company is a function of knowledge and information about the company. How many people know about the business performance and prospects of the company? Are existing IPO shareholders retaining their stakes or selling off? What issues are being discussed in the business press about the company? Is the company's public profile positive and on the rise? Even a casual reflection on these issues will suggest how important it is for the company to nurture informed Wall Street contacts.

How Does the Company Best Manage the Public Outreach and Information Dissemination Process?

Like most business endeavors, an investor relations program to capture the public limelight faces stiff competition. The NASD and the NASDAQ electronic stock market represent a beehive of frenetic activity. Consider the statistics (in part, from the NASD and NASDAQ websites):

- NASD has approximately 5,200 member firms.
- Member firms represent approximately 97,000 branch offices and 660,000 registered reps.
- NASDAQ lists approximately 3,300 companies.
- Registered stock analysts total on the order of 3,200.
- The company's shareholder list can range from two thousand to tens of thousands.

To disseminate the company's "story" to this highly populated and complex network, a competent, charismatic, intelligent, and well-connected senior member of the management team should be sent off to wage the Investor Relations Crusade. Regrettably, an individual with this complete skill set rarely exists. Accordingly, team effort is often required, often with the use of an outside investor relations firm.

Every investor relations campaign, of course, is subject to the guidance and dictates of the company's investment banking sponsors, and must be crafted somewhat in response to the share price trends.

What Is the Company's Message to the Street?

The Street has little time for preliminaries. The concerns of fund managers, account executives and analysts are straightforward:

- Who is the company?
- Why is its story special?
- What are earnings expectations?
- What is the associated risk?
- What confidence is there in the company's management?
- What is the distribution of stock ownership ?
- What is the company's value?

The company must anticipate questions related to these concerns, recognizing that each contact in the financial community has a particular agenda. Some are interested in investing in "a new story"; others are only willing to start a monitoring file on the company .The company would be well advised to start meeting with the lower profile analysts and fund managers, listen to their feedback, fine-tune the company's message, and work the communications campaign up the Wall Street food chain.

If the entrepreneur is involved in the communications program with Wall Street, he or she must quell the natural entrepreneurial tendency to paint an overly optimistic picture of the company. Promise only those results that can be delivered. The pressures to perform are difficult enough without self-inflicted damage. In this regard, Sommer (2000) has devised "Ten Commandments" when dealing with the Street:

1. Remember to keep holy thy earnings announcement day.
2. Thou shall not covet thy neighbor's stock options.
3. Honor thy independent accountant and thy SEC.
4. Thou shalt not take the rules of GAAP in vain.
5. I am the SEC. Thou shalt not manipulate financial results before me.
6. Thou shall not commit accounting adultery.
7. Thou shalt not steal revenue from the next quarter.
8. Thou shalt not bear false numbers to the Street.
9. Thou shalt not send thy customers goods to warehouses.
10. Thou shalt not use side letters.

If the Street thinks that the company has violated any of these Ten Commandments and has "sinned," the company will be shunned. One false step can be cataclysmic to the company's reputation and take an enormous effort to repair.

All too often, I've observed a crest-fallen CEO of a newly public company who has experienced the market sentiment turn against the company. The "instant fame" of an IPO is a curious phenomenon. At first, it's like the cute little puppy that you warm up to. But as it gets older, it's becomes like a rabid creature that turns on you and eventually eats you up.

Interference from Pesky Third Parties

What Factors Impact the Company's Relationship with Its Public Shareholders?

Not unlike having a busy-body mother-in-law (or father-in-law, to be fair) interfering with the newlyweds, the public company must start anticipating when the next (regulatory) hurdle might appear, thus confirming that the honeymoon period is finally over. Going into the IPO process, company management certainly would be aware of the basic reporting requirements of quarterly (10Q) and annual (10K) filings with the SEC. Not so well known perhaps would be the breadth of the compa-

ny's "in-law" population. Regulatory hurdles abound. In addition to the SEC, there are the NASD, the NASDAQ electronic stock market, the Financial Accounting Standards Board (FASB) and, of course, the accounting industry.

The highly publicized Enron scandal brought down the firm of Arthur Andersen, reducing the Big-Five audit industry to a Big-Four. The U.S. Congress became involved and passed the Sarbanes-Oxley Act to tighten the screws on corporate scrutiny. The legislation passed in the Senate by a 97–0 vote, suggesting that the pendulum had really swung radically in the direction of intensified corporate governance, or that no one in the Senate had actually read the bill or that not enough debate occurred to create healthy dissent, or all of the above.

The net effect of Sarbox—ironically—has been to reinvigorate the scandal-weakened accounting profession. Reviled in 2002 as enablers of corporate con artists, the audit firms have made a near-miraculous come-back. The Big-Four of KPMG, PriceWaterhouseCoopers (PWHC), Ernst & Young (E&Y) and Deloitte & Touche had record revenues and profits for 2004 (Jenkins 2005) and hiring has gone "through the roof." As reported by The Economist (2004), the Big-Four audit 97 percent of all U.S. companies with sales over $250 million. These are enormous firms:

Firm	Fee Income (2003) ($B)	Total Employees
Deloitte	15.1	119,770
PWHC	14.7	122,820
E & Y	13.1	102,969
KPMG	12.2	98,900

Certainly there are arguments for such an oligopoly; it provides the scale necessary to assess broad operations of the multinationals. These firms worry about litigation arising from scandal. And the scandals continue. During 2004, we observed various forms of financial manipulation unearthed at Fannie Mae, at Nortel, and at Italy's Parmalat. Accordingly, the audit industry devotes huge resources (10–20% of revenues) to shield themselves from litigation risks. In the end, of course, clients pay the tab.

Big Company Scandals Aside, Don't IPO Companies Enter the Public Playing Field with a Clean Slate?

Not always. What this increased call for corporate governance means for the smaller newly public company is more than a little troubling. With the current regulatory climate at its peak of intense oversight, and accounting firms flexing their CPA muscles, many new public companies enter this battlefield unprepared. As reported by Moregenson (2005), the IPO Plus Aftermarket Fund (Greenwich Conn.) chronicles the shareholder-friendly practices of IPO companies and finds them lacking. Looking at the use of proceeds, management and BOD compensation, and BOD independence—IPO Plus finds that 51 percent of the companies that went public in 2004 had poor to very poor governance practices. This is even lower than the 37 percent negative governance figure for 1999 when the stock market went crazy.

Newly public companies must learn the ropes in dealing with all these pesky regulators, install all the needed internal control systems, and make all appropriate public disclosures.

What Needs to be Disclosed?

Companies are required to file an 8-K with the SEC documenting "material" events. The dilemma, of course, is defining what "material" means. As reported by Katz (2004), the SEC has stated in a 1999 staff accounting bulletin that an event is material "if there is a substantial likelihood that a reasonable person would consider it important." Most entrepreneurs and CEOs I know are not terribly edified by such mushy guidance! The SEC also reduced the 5 percent of net income rule-of-thumb as to how big an impact there must be before the need to file an 8-K. I had found the 5 percent guideline to be useful. Now the path to determining disclosure is even more fuzzy. Editorial bias aside, here's what Section 409 of Sarbanes-Oxley says has to be put in an 8-K filing:

- An unexpected entry into a material definitive agreement;
- An unexpected exit from a material definitive agreement;
- Creation of a material direct financial obligation, including long-term and short-term debt and capital-lease commitments, or off-balance-sheet arrangements;
- The acceleration or increase of a material direct financial obligation or an obligation under an off-balance-sheet arrangement;
- Material costs incurred during the exit from a business or the disposal of an asset;
- Impairment of assets;
- Notice of a delisting or failure to satisfy a continued delisting rule or standard, transfer of listing, or completed interim review; and
- A decision that the company's previously issued financial statements or audit reports can no longer be relied on.

On August 23, 2004, the SEC issued new regulations requiring companies to file 8-Ks within *just four business days.* The above guidelines might include anything from a big customer win to a significant layoff to a new executive compensation. In all cases, management must make determinations of materiality, and how to disclose and communicate such events "on the fly." As a Wall Street friend suggests, "When in doubt, 8-K it!"

What Other Regulatory Responses Need to be Considered?

There's a shopping list of possible regulatory issues for company management and its BOD to consider. To cite just one exam-

ple, consider Syre's report (2004) of Massachusetts-based Brooks Automation, Inc. In December 2004, the company disclosed that it was accelerating the vesting of 1.3 million *"below water" options.* That it would make worthless options exercisable immediately reflects the anticipation of changing accounting rules in June 2005. Even though options may have no market value, they still may have accounting value and need to be expensed. Not acting preemptively to the rule change deadline would present the company with the worst of both worlds: the expensing of options to depress earnings while being unable to provide financial incentives to company employees since the options would be the equivalent of worthless Confederate dollars.

As Neble reports (2002), M&A activity has been impacted negatively by the *elimination of the pooling-of-interests* method of accounting for acquisitions. FASB rule changes now require the use of the purchase method of accounting. In short, various categories of intangibles must be separated-out from goodwill, valued, and amortized over their respective useful lives. Valuation experts must be used, and various asset impairment tests must be applied.

Another area of concern is addressing and eliminating *"dummy corporations"* or special purpose entities (SPEs) under recently released FASB Interpretation No. 46 (FIN 46). As reported by Reason (2004), these dummy corporations have typically been used to own assets the company doesn't want on its own books, for any number of reasons. In the post-Enron environment, investors frowned at the appearance of impropriety and precipitated the issuance of FIN 46.

Certainly more important is *Section 404 of Sarbanes-Oxley.* As reported by Nyberg (2004), now company management must not only disclose financial control weaknesses, but provide monitoring and documentation of its financial control systems with annual testing by the company. Then—you guessed it—the company must "coordinate" with its auditors to determine what deficiencies are material and require disclosure. When management and the auditors disagree, guess who wins? And if the company's financial systems are found lacking, how can investors trust the company's public information? Consider NYSE-traded Adecco SA which could not convince Ernst & Young to sign off on its financials because of weak internal controls. The announcement whacked the share price 35 percent. Six months and $121 million of fixes later, the share price was still down 20 percent%. A Wall Street wag offered that "Sarbox has done for public companies what the Titanic did for the cruise business."

What Other Regulatory Issues Have Wall Street Implications?

Other than constantly having to answer analyst questions like "How's the company doing on implementing Sarbox-404?" and "How much will it cost the company for compliance?," the other important regulation of recent note (October 2000) is Regulation FD (Financial Disclosure). As reported by Rudman (2001), the regulation requires the company to disclose to *all* shareholders material information that the company shares with securities market professionals and fund managers. In the game of cat-and-mouse between corporate officer (mouse) and analyst (cat), Regulation FD constrains the mouse but not the cat. In their sublimely clever ways, analysts can often extract information before the company representative knows what has happened. But the company has to work with the analysts to receive much-sought-after research coverage.

The key point to remember about this overwhelming set of rules and regulations is that the regulation has been in response to various sins of commission and sins of omission on Wall Street. Perhaps humorist Dave Barry (2002) provides insight:

> **Q:** Why didn't Wall Street realize that Enron was a fraud?
> **A:** Because Wall Street relies on stock analysts. These are people who do research on companies and then, no matter what they find, even if the company has burned to the ground, enthusiastically recommend that investors buy the stock.

Keeping It All Together

How Does the Company Cope with All These Divergent, Powerful Forces Impacting It?

In a way, the Board of Directors serves as a company marriage counselor, refereeing the disputes between the company and the shareholders and the pesky and often interfering third parties (regulators). The major BOD oversight concerns for the new IPO company are serious:

- How to fulfill the Street's earning estimates for the company;
- How to assess the company's management team to determine if it is holding up under public scrutiny;
- How to stay listed on NASDAQ (or other exchanges); and
- How to raise additional capital, as required.

How Should the Company's Management Handle Earnings Estimates with Wall Street?

The concept is simple: Do the numbers right and communicate with everyone. The challenge, as always, is acceptable execution.

It is no deep secret that public companies appear to "manage earnings." A study by Thomson Financial (Moregenson 2004) examined how many Dow 30 industrials met (or beat by a penny) consensus estimates during each quarter over a five-year period. On average, almost half (46%) accomplished this feat. When one considers all the variables that go into project-

ing earnings, such bull's-eye accuracy of *"beating the analysts' estimates by a penny"* is beyond chance. General Electric in the 1990s, for example, made the front page of the *Wall Street Journal* (Loomis 1999) chronicling the many ways CEO Jack Welch smoothed GE's earnings. GE's tricks of the trade included the careful timing of capital gains and creative use of reserves and restructuring charges. Henry reports (2001) a number of ploys and potential abuses that companies use.

- *The Big Bath.* Takes a large write-off, booking costs now to boost earnings and margins in the future.
- *Vendor Financing.* Lends money to cash-strapped customers so that they can purchase the company's products, boosting sales and profits.
- *Pension Gambit.* Determines that the company pension plan is overfunded and reduces company contributions, hiding the gain in the financial footnotes.
- *Before Its Time.* Treats pending sales as if they're already on the books and logs in sales without netting out agreed-to rebates.
- *Backdoor Bargains.* Motivates a big customer to place orders by buying its stock or granting it cheap warrants.

My strong prejudice is to avoid such ploys. The downside risk of regulatory intervention generally outweighs any short-term upside benefits. The London investment community has a wonderful way of warning against aggressive management behavior: "Don't try to be too clever by half!"

Sometimes the company does many things well and still loses. Swartz (2005) reports, for example, that eBay's 2004 Q4 earnings rose 44 percent, but still disappointed Wall Street, sending the share price down 12 percent overnight. eBay's CFO correctly commented, "My concern is managing the company's performance, not its stock price"

Regulation FD provides the company with some protection in dealing with the Street. As suggested by Graham (2001), there are certain approaches companies employ to keep investors and analysts informed under Regulation FD that should actually rein in the company and prevent it from being *"too clever by half:"*

- Designate a small number of management representatives to discuss company developments with the public.
- Determine in advance how to react rapidly if someone discloses information inappropriately. Have available a SWAT response team, including company legal counsel, to put out the fire.
- Don't respond to rumors, unless requested to do so by a stock exchange.
- Employ webcasts to make earnings conference calls and company presentations available to the public.
- Eliminate selective communication to analysts, making forecasts available to all in press releases.
- Disclose key business trends more often than quarterly. Provide updates at regularly scheduled intervals.

How Should the Company's BOD Evaluate Management's Performance?

Carefully and often. The half-life of an entrepreneur-CEO in a newly public company is embarrassingly short. Anecdotally I offer several explanations. The entrepreneur-CEO:

- is often untrained for a "big company" environment;
- wants to focus on the business of the company, not the business of Wall Street;
- reacts defensively when experts criticize the company;
- reacts dismissively when other members of management are assigned to investor relations;
- begins to fret when the litany of new constraints (e.g., Regulation FD, Sarbox–404) seems to handcuff management; and
- stops having fun running the company.

What should a BOD do if management performance falls short? The set answer, of course, is to take appropriate corrective action. Easier said than done. Even independent directors have hearts. I've been involved on several occasions in replacing the entrepreneur-CEO. While personal ties on the BOD can be strong, responsibilities to shareholders take precedent. It is never any fun, however, to be known as the "Dr. Kervorkian of the board room!"

Does the Street appreciate dramatic BOD actions? Often the departure of a CEO has a positive impact on the company's share price. Kranz (2005) reports that in addition to the 7 percent one-day up-tick that Hewlett-Packard enjoyed from the ouster of CEO Carly Fiorina in 2005 (Q1), over the years other companies have experienced even better one-day share price jumps:

- Rite Aid—40.8%
- Quest—20.5%
- J. C. Penney—16.0%
- 3M—11.1%

CEO turnover-of-the-uglier-kind involves scandal. Many know of Bernie Ebbers at WorldCom Inc., Dennis Kozlowski of Tyco International Ltd., Richard Scrushy of HealthSouth Corp., and Ken Lay of Enron Corp.—all involved in marquee prosecutions for various forms of fraud and conspiracy. Not the kind of business legacy that the aspiring entrepreneur had in mind in pursuing an IPO. In growing a public company, smarts and hard work are important. The CEO must also have a moral compass.

What kind of trouble can the new public company encounter regarding continued listing on the NASDAQ stock market?

Certainly no company proceeds with an IPO with the thought of someday becoming delisted. If the company hits some speed bumps in the road to success, however, earnings forecasts can be missed, cash flow can continue negative, and the

public market can turn its back on the company. The following are the listing requirements for the NASDAQ National Market:

- *$1 Share Price.* If a company's shares trade for less than $1 for 30 consecutive days, the company has 90 days to bring up the share price.
- *Public Float.* At least 750,000 shares of the company must be available for public trading.
- *Public Float Value.* The total value of the publicly traded shares must be at least $5 million.
- *Net Tangible Assets.* The company's fixed assets and accounts receivable must be worth at least $4 million.
- *Number of Shareholders.* At least 400 people must hold a minimum of 100 shares of company stock.
- *Market Makers.* There must be at least two market makers willing to buy and sell company shares.
- *Timely Public Filings.* Companies must make all filings.

Each trading day, NASDAQ publishes on its website a list of companies that are noncompliant with its continued listing standards. An analysis of a recent day (February 7, 2005), provides the following profile of 102 companies cited with compliance deficiencies:

- Bid price—38 companies
- Delinquent filings—21 companies
- Audit committee composition—20 companies
- BOD independence—12 companies
- Net tangible assets—5 companies
- Other deficiencies—12 companies

Can the Company Solve Some of Its Listing Problems by Raising More Capital?

Perhaps. Obviously BOD composition issues and timely SEC filings can be addressed without more capital. Certainly more paid-in capital helps to improve the net tangible assets standard. If a secondary public offering is managed correctly, it is possible to improve the company's bid price. If the bid price is a problem to begin with, it's undoubtedly a particularly bad time to contemplate a secondary public offering.

When the public capital markets are not considered viable, the company may consider turning to the private markets and a hybrid security called a PIPE (for Private Investment in Public Entities). Once viewed as purely bail-out funding, the PIPE instrument has attained increasing respectability as more companies do PIPE deals. Fink (2004) reports that approximately 800 to 1,200 PIPE deals per year have been transacted since 2000. How PIPEs are structured can be illustrated by Evergreen Solar (Marlboro Mass.). In May 2003, Evergreen raised $29.5 million in the form of preferred stock convertible into common shares at a 25 percent discount from the public market price and warrants giving the investor the right to sell the stock at a 125 percent premium over the PIPE offering price after SEC registration. The key to this deal was a fixed conversion rate (no "downward death spirals") and an investor base that was not inclined to short-sell the stock. Evergreen saw its stock climb more than 120 percent (through the end of 2004) since the PIPE.

Despite Evergreen's story, and even with protection against death spirals (variable conversion rates with no floor price), companies may discover that the use of PIPEs put downward pressure on the stock price because of the discount and dilution. The irony is that small capitalization companies generally need the infusion of new capital the most, but investors like to enter into PIPE transactions with larger companies.

How Does One Assess If "Being Public" Is Working for the Company?

Not unlike a marriage, money problems and stressed relationships are sure indications of problems. How well does the company relate to the distractions of third-party regulators and investors? With increased pressures from auditors and their increasing empowerment from Sarbanes-Oxley, it is appropriate to question whether access to public capital is worth the cost of maintaining a public company. Consider the average incremental compliance costs (over being private):

- Accounting staff—$250K
- Audit—$200K
- Legal—$100K
- Investor relations—$75K
- Director & Officers' insurance—$250K
- SEC filings and annual meeting—$50 K
- Miscellaneous public expenses—$75K

Might the company have a better use for $ 1 million? Perhaps. The option to go private is tortuous, often requiring a large reverse stock split to induce the small shareholders to sell-off. Once the number of shareholders of record is below 300, the company can qualify for delisting. The very contemplation of such a move can cause downward pressure on the share price and market value. The process is difficult but doable. It's like getting the toothpaste back into the tube.

In summary, just as a marriage can result in divorce, an IPO can lead to delisting or a company deciding to "go private." That there is a downside scenario doesn't mean you don't take the big IPO leap. Entrepreneurs understand risk. Every case is unique. Like many marriages, many IPOs are unqualified successes. A typical IPO results in a capital raise-up ($25–$200 million) far in excess of what be available to a private company; and at valuations ($50–$1,500 million) many times larger than otherwise possible. This is the IPO carrot!

Should a company pursue an IPO? The situation is much akin to how one advises a friend contemplating marriage: "How exciting! But have you really thought it over?"

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About the Author

JOSEPH LEVANGIE (joe.levangie@comcast.net) is a Boston area investor, adviser, and entrepreneur. Over the last quarter century, he has helped launch several dozen new business enterprises from first a large company platform, then from a not-for-profit incubator, and later as a 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 Mr. Levangie's ventures successfully completing an IPO has now reached double figures.

He has served on the BODs of dozens of private and public companies, and has been a guest reviewer at Business Plan contests at MIT and Harvard Business School. Mr. Levangie is an active alumnus of both institutions. He currently is vice chairman of Ardour Capital Investments, a New York City investment banking firm.

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