



INCUBATORS IN THE NEW ECONOMY

BY

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**SUBMITTED TO THE SLOAN SCHOOL OF MANAGEMENT
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF**

MASTER OF BUSINESS ADMINISTRATION

AT THE

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

**JUNE 2000
(VERSION 1.00E)**

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Submitted to the Sloan School of Management
on May 19, 2000
in partial fulfillment of the requirements for the Degree of
Master of Business Administration

ABSTRACT

In recent years, and especially during the past six to nine months, the number of new for-profit high-technology incubators has increased dramatically. Incubators in the New Economy are seen as organizations that can address the unique demands required to create today's successful new ventures: speed-to-market, synergy and network, talent cultivation, and strategic cohesiveness. This study looks at this phenomenon and explores the incubator's operating models and organizational forms, focusing specifically on the value-proposition, sustainability, and scalability factor, with a side analysis of vertically-focused incubators in the wireless-telecommunications space.

The analysis consists of business articles and a total of more than 80 in-depth interviews with incubator founders, venture capitalists, New Economy analysts, New Economy visionaries, entrepreneurs, investors both public and private, and telecommunications executives.

Overall, the industry is new and "hot." A handful of incubators provide obvious value while many others may not provide as much value but are changing to meet the needs of the market. Investors should watch for the effects of Darwinian Theory of Entrepreneurs and plan measures to counter them. As with any type of new industry or business, there are numerous pitfalls.

NOTE: I'm now working on an extended version of this study that will cover more incubators, with a greater focus on the international space, more venture capitalists' comments, as well as those from others in the industry, and provide my comments on other related and topical international business issues. Please signup on the email list at the <http://chinsomboon.com/incubator> website to be notified when this new extended version is available.

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ACKNOWLEDGEMENTS

I'd like to acknowledge special thanks to a number of individuals including Professor Ed Roberts and Ken Morse for their very strategic connections and advice, Professor Simon Johnson, Professor Richard Locke and Shari Lossberg for their Sloan class titled Entrepreneurship and Venture Capital without Borders as well as their great advice, Erin Hoffer (Sloan MBA 2000) for planting the idea of possibly doing a Thesis in the first place, Nils Fonstad (Sloan doctoral student) and Sean Safford (Sloan doctoral student) for helping me hone my thoughts as well as read my Thesis in its most primitive formats, Jim Matheson (HBS MBA 2001) for HBS contacts, Matt Aldrich at KPMG for helpful contacts and future suggestions, Francisco Varela (Sloan MBA 1999) at McKinsey for additional insight and strategic contacts, Benjamin C. Powell (Wharton doctoral student) for an additional listing of incubators, Jana Branch as my Editor, and many others. Thanks also go to the support and contacts of many of my classmates, colleagues, and professors here at the MIT Sloan School of Management, as well as many of my colleagues at the Harvard Business School, especially Peggy Fang and Laurent Burman, both for getting me on-board as a CTO Director for HBS Cyberposium 2000 where additional contacts for the Thesis were made. Special thanks also go to visionaries that have contributed and have provided great insight into my topic, including Warren Buffett during his visit to MIT Sloan to impart his words of wisdom, John Hagel during his presentation at McKinsey's New Economy conference at the University Park Hotel @ MIT, and George Gilder as a speaker at Cyberposium.

BIBLIOGRAPHIC NOTE

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1 INTRODUCTION

In recent years, and especially during mid-1999 to early 2000, the number of new for-profit high-technology incubators has increased dramatically. Incubators are seen as organizations that can address the unique needs of today's new ventures: speed-to-market, synergy and network, talent cultivation, and strategic cohesiveness. The growing number of incubators in the New Economy also represents a wide range of different organizational forms. This paper explores the range of operating models and organizational forms of incubators, focusing specifically on their risks and benefits. This exploration includes an analysis of horizontally (general) versus vertically focused incubators, using the example of wireless-telecommunications in the vertical market.

At the time of this study, business journal articles abound on the phenomenon of for-profit incubators. However, at the time of publication, this paper represents the only comprehensive study with a significant body of supporting research.

This study first explores the following issues:

- The unique nature of an incubator
- How incubators relate to venture capital firms
- The various operating models
- The value proposition of an incubator
- The incubator's risk and pitfalls, such as balancing incentive structures to "build to last" rather than "build to flip."

I suggest answers to the following questions:

- Is there a need for incubators?
- Are incubators just another way to deploy cheap capital?
- How does an incubator ensure good deal flow?
- Why would an entrepreneur go to an incubator?
- How does an incubator accelerate a venture?
- If the market dried up today, would the incubator survive?

- What makes an incubator sustainable and scalable?
- Are incubated companies somehow inferior to companies that have come into being through a process of “trial by fire”?
- Are incubators good investments for New Economy investors?

This study focuses on for-profit incubators, with a portion dedicated to non-profits and their evolution, as they seem to be moving toward partnership with for-profits and/or have some semblance of the for-profit model in their operating structure. Unless otherwise noted as the exception, the paper focuses on the for-profit model.

I conducted interviews with seven groups of people/firms to gain from their insights and experience with incubators:

- Founding members (usually the founder and/or chairperson) of the incubator
- Top-tier high-technology venture capitalists (mostly the founder or a General Partner)
- Knowledge leaders or visionaries in the New Economy space
- Internet and New Economy analysts
- Public stock investors with holdings in excess of \$100,000
- Entrepreneurs, with and without track records, in and out of incubators
- Telecommunications firms that have explored the wireless-telecom industry and the vertically focused incubators in this space.

The interview questions tailored for each group are presented in Appendices I through VII. The questions for incubator founders explored the operating facets of their organizations as well as their own opinions of the industry. Many experts in Boston, Los Angeles and the San Francisco Bay area were interviewed in person. Experts in other geographic areas were interviewed by telephone.

I strove to include as many international incubators and venture capitalists as possible. In total, more than 70 incubator founders/executives (some were multiple locations of a single organization), the senior partners from more than 25 venture capitalist firms, and a

handful of experts in the other categories were interviewed for their comments. A summary of incubator data points is included in Appendix VIII¹. Data columns that had a small sampling and/or would give away the identification of a firm were omitted (classification of incubators was omitted for this reason). Appendix IX contains a mapping of incubators interviewed by region. The analysis also took into consideration recent business literature and industry publications.

Many of the firms gave some portion of proprietary information to include in the roll-ups and trends that are presented in this report. A large number didn't yet know how they were structured, knew that their structure would be changing in the very near future, or had to remain vague about the process to protect their proprietary technology. This limitation is a major reason for the qualitative nature of this report. Meaningful measurements in terms of numbers of firms or statistics are not available because the variance was great, sampling size was small for each of the different models (they just don't exist yet), and numbers are rapidly changing from month-to-month.

One indication of rapid change is the large number of follow-up calls I received from incubator founders interviewed who asked for my feedback on their model and suggestions for improvement. They also inquired about trends that are occurring in order to work out solutions that might be more fitting to their organization. Right now, it's all an experiment—they're playing; I'm learning.

¹ Research from interviews conducted after May 1, 2000, will be included in the next version (extended version) of this study. Please feel free to go to <http://chinsomboon.com/incubator> and signup on the email list and discussion forums. An updated list of companies and individuals interviewed (this and the extended study) is available on the website. The extended version will have a greater international focus as well as cover relevant topical business issues.

2 BUILDING THE NEW ECONOMY HIGH-TECHNOLOGY FIRM

Excerpted from an interview with [John Doerr](#) of top-tier venture capital firm, [Kleiner Perkins Caufield & Byers](#):²

Reporter: What is the New Economy?

John Doerr: The old economy, you learn a skill. The New Economy is lifelong learning. The old economy is concerned with security; the new is risk-taking. The New Economy is job creation; the old is job preservation. The old economy is capital equipment. In the new, it's intellectual property that matters. The old economy is about the status quo. The New Economy embraces speed and change. The old economy is top down and highly regulated, and tends to be a zero-sum game: You win, I lose. The New Economy is distributed, and instead of being highly regulated, we form public/private partnerships. If the old economy is zero sum, the New Economy is win-win.

Building a startup in the New Economy is not an easy task. It's about getting to market quick, building the right strategic alliances, raising the right type of capital, timing and market conditions, and managing any number of other intangible factors that can often take a startup on a roller coaster ride if not handled properly.

2.1 Speed-to-market

The New Economy today is characterized by a land-grab³ mindset, and it's being proven in the marketplace that those firms that were first to market maintain the lead. Exemplars

² "Doerr: The 'New Economy' and its biggest fan," *Business Week*, March 16, 1998.

such as [Yahoo!](#) and [Amazon](#) demonstrate that success depends on getting to market fast and reaching a critical size quickly. “If you have an idea, you have to act on it now. With the Internet, an idea has no time to evolve. It has to happen now.”⁴

2.2 Network: synergies and partnerships

In today’s New Economy, no one firm can do it alone. It’s about creating partnerships and strategic alliances that play on the strengths of individual firms. It’s being proven that the right strategic partners can make or break a deal. For instance, many firms are now partnering with [AOL](#) to gain access to their asset of users, something that cannot be easily duplicated.

2.3 Disruptive technology innovation and development

Creating innovation either within a firm or outside of it depends on creating technologies and other developments that might be disruptive to the main product line or normal way of doing things. These disruptions are innovations. Without the willingness to disrupt standard practices or the mainstay product, the firm will not survive for long, because someone else will discover it and trim away the firm’s successes. If someone is going to do it, it might as well be you, meaning that you maintain market share and momentum rather than see it slip to a competitor.

2.4 Talent cultivation

The power behind a venture in the New Economy springs almost completely from the composition of the founders and others within the organization. The organization must cultivate its talent pool and incentivize them to build on their talents. These can be technical, strategic, marketing, operations, investment, or any other skills that are essential to the creation and operations of the venture.

³ Land-grab is a New Economy term that is used to describe the fact that the first company to a certain market, tends to grab the most “land” or mind share in that market.

⁴ Comment by Neil Weintraut, 21st Century Internet Venture Partners from article: “How to Speed Up Your Startup,” *Fast Company*, May 2000.

2.5 Going global

Today's economy is truly global. It's no longer sufficient to own a single domestic market, but rather necessary to gather the right resources to grow into other markets, staking the ground and doing the land grab in those markets. Organizations that can quickly accomplish international expansion are the firms that will survive in the New Economy. "The players that can first scale their business across the globe will erect powerful barriers to those that follow."⁵

Pertinent questions for the New Economy business person to ask when considering going global:

- Is your business model suited to globalization?
- What types of Internet and related businesses will be most successful in going global and which should be targeted first?
- What markets should be targeted?
- With whom should a business partner?
- How should the organization be structured?
- How can a business scale to those other markets?

⁵ "Go Global," *Business 2.0*, May 2000

3 EVOLUTION OF NEW VENTURE FUNDING

3.1 Evolution of private equity and venture capital

Venture capital firms have provided much of the cash needed to fuel the technology revolution over the past few decades. As the Internet grows into one of the most significant technological developments of the late 20th and 21st centuries, spawning a plethora of new companies and incredible wealth, the venture capital industry is becoming increasingly mainstream. Large corporations are starting venture capital arms, venture capital firms are helping traditional offline organizations develop Internet spin-offs, and mainstream business publications are allocating more space for stories about venture-backed technologies and companies.

3.2 Venture capital fund raising⁶

In 1999, venture capital fund raising sky rocketed to \$46.54 billion, a 66.5% increase over 1998, with a number of funds over \$1 billion. With so much capital and larger funds, it is becoming increasingly difficult for venture capital firms to find ways to deploy that capital in good investments, especially for small and early stage investments.

⁶ Alissa Leibowitz. "Climbing High Into the New Century." *Venture Capital Journal*, April 2000.

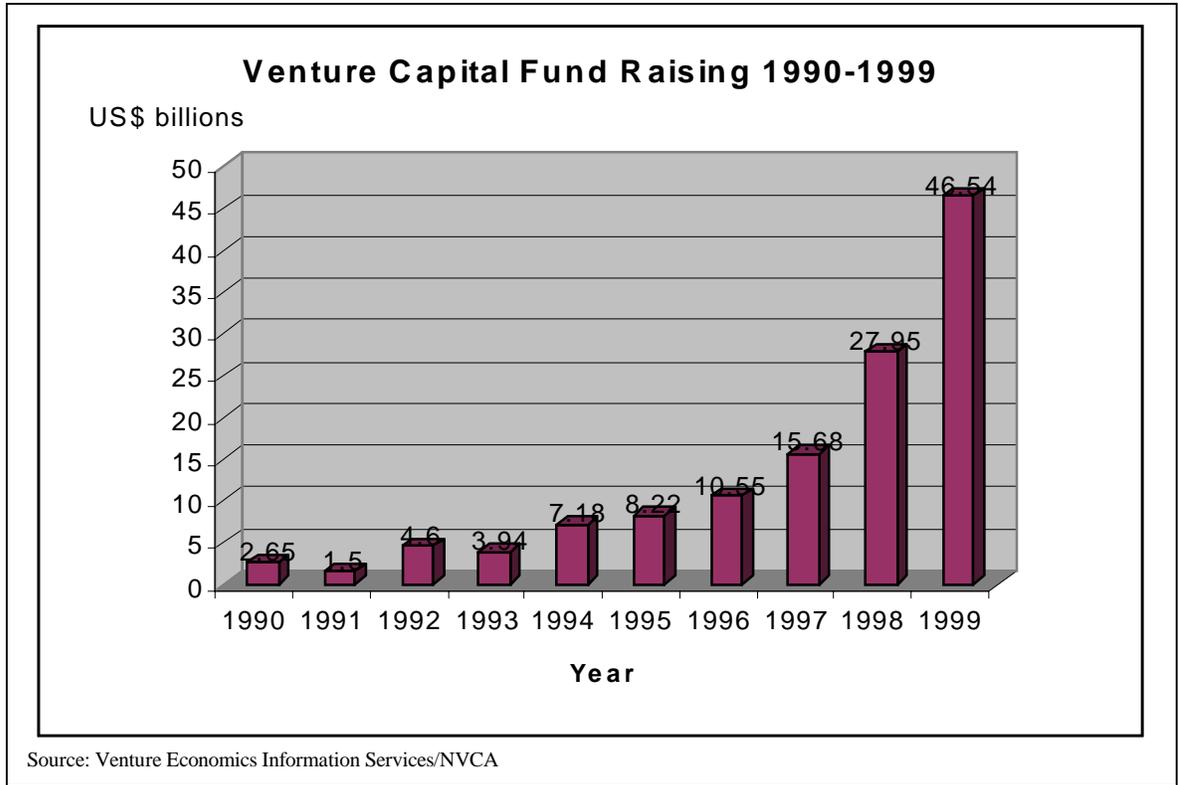


Figure 3-1: Venture Capital Fund Raising⁷

3.3 Venture capital market space

Venture capital has traditionally invested in later stage startups, pre-IPO. There have always been a handful of firms that did fund seed and early stage ventures, which has been seen as riskier but with higher returns on average, especially in an active high-technology public market.

3.4 Venture capital investments

In 1999, \$35.6 billion of venture capital was invested in startups, 2.5 times that of 1998, according to a [PricewaterhouseCoopers Moneytree](#) survey.⁸ That dollar figure represents some 4,006 companies, 41% more than the previous year. The size of the average

⁷ Figure “Climbing High Into the New Century” by Alissa Leibowitz. *Venture Capital Journal*, April 2000.

⁸ PricewaterhouseCoopers Moneytree survey released on February 14, 2000.

investment in a technology-based company rose to \$9.6 million, up 87% from the \$5.15 million average in 1998. \$32.4 billion, or 91% of the total in 1999, was invested in technology firms, with nearly \$20 billion or 56% invested in Internet companies (including telecommunications and software).

Venture Capital investments 1999			
Area	Invested '99	Internet Area	Invested '99
Software	6.6	E-Commerce: B2C	4.5
Telecom	5.2	Access/Infrastructure	3.4
Business services	4.6	Content sites	3.3
Retail and distribution	3.6	Services	3.2
New media	2.9	Tools/Applications	2.9
		E-Commerce: B2B	2.6
		Internet Total	19.9

Source: PricewaterhouseCoopers MoneyTree US Report, 1999 Results

Figure 3-2: Venture Capital Investments 1999⁹

3.5 Greater focus on early stage deals¹⁰

In 1999, \$15 billion, or 42% of the total venture capital, was invested in early stage deals and represented 50% of all companies receiving funding, which exceeds all venture funding in 1998 in all stages of development. Each early stage firm garnered an average of \$7.5 million with those focused on the Internet grabbing \$8.9 million.

This trend highlights the growing level of investment required to launch as well as the highly competitive environment for funding seed, early, and first stage deals.

⁹ Figures derived from the PricewaterhouseCoopers MoneyTree survey noted above.

¹⁰ Information derived from PricewaterhouseCoopers MoneyTree survey noted above.

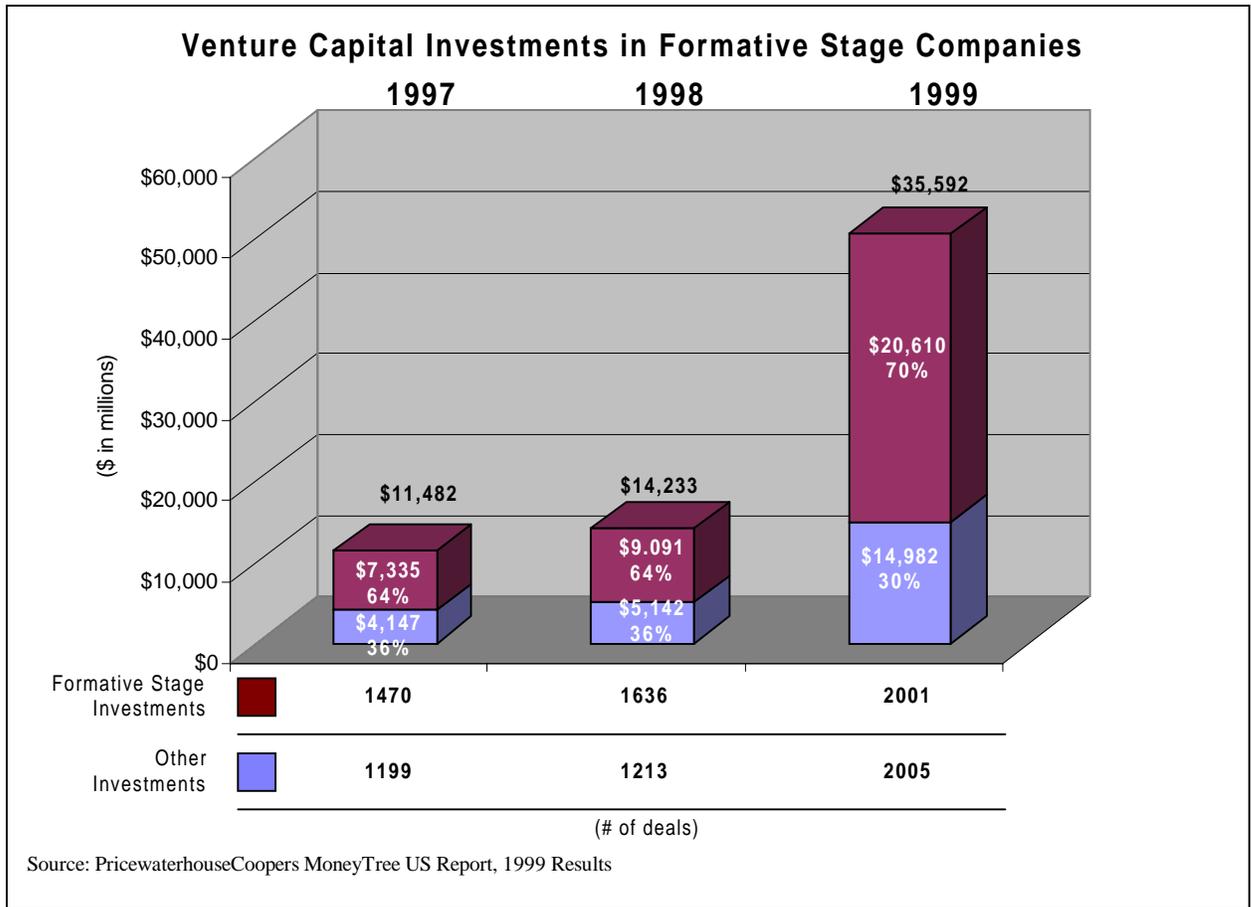


Figure 3-3: Venture Capital Investments in Formative Stage Companies¹¹

3.6 Efficient Investing

There is no real reference point to determine whether or not the best investments are funded. Good investments may be missed and thus being missed, never reveal their potential to the public. As [Professor Edward Roberts](#) notes in his book, *Entrepreneurs in High Technology*, "... the large number of alternative sources of funding in the United States producing at least a working marketplace, though one that is probably far from 'efficient' in economic terms."¹²

¹¹ Figures derived from the PricewaterhouseCoopers MoneyTree survey noted above.

¹² Roberts, Edward B. *Entrepreneurs in High Technology*. Oxford University Press, 1991.

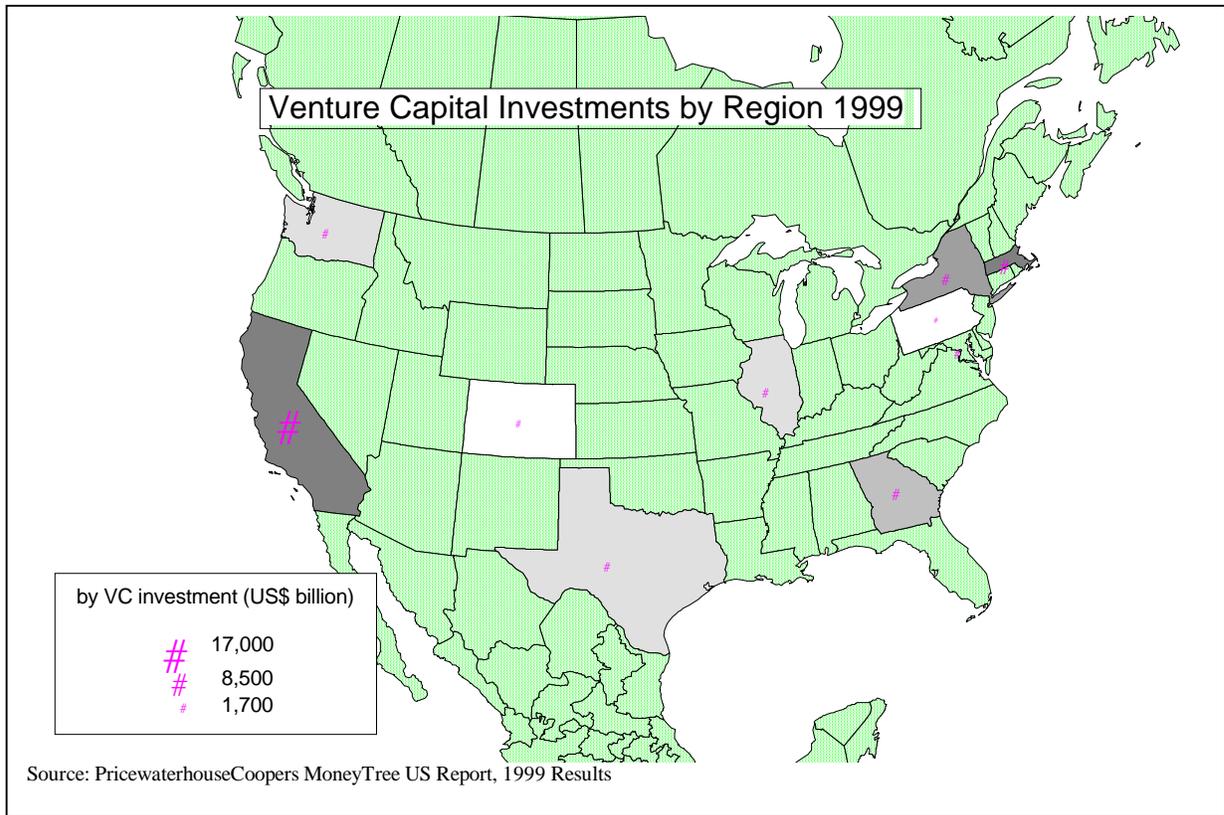


Figure 3-4: Venture Capital Investments by Region 1999¹³

3.7 Money as commodity

Today, money is a commodity, as can be seen by the amount of venture capital that is being invested, as well as the growing number of funds. Valuations of companies are being driven by the fact that there's too much money chasing too few deals.

¹³ Figures derived from the PricewaterhouseCoopers MoneyTree survey noted above.

4 HOW VENTURE CAPITAL WORKS¹⁴

Now let's talk about how venture capital works. This is a necessary frame for any discussion about incubators since the industries are intertwined, and it's arguable that they're even the same industry.

Venture capital exists because of the structure and rules of capital markets in which an entrepreneur with an idea often has no other place to turn for funding. In today's New Economy, there are usually no hard assets for a bank to collateralize, nor can banks bear the risks inherent to startups or raise their rates higher than that allowed by law.

Typically, venture capital has played in a specific range in the stage of a startup, that being when the innovative product or service is nearly ready for commercialization. Venture capital funds have ballooned from as low as \$20 million in the past to single funds of over \$1 billion today.

Venture capital firms are typically Limited Liability Partnerships. They have Limited Partners (LPs) who typically put in the bulk of the investment funds and General Partners (GPs) who actively manage the funds on a day-to-day basis. GPs make the investment decisions, evaluate business plans, and sometimes actively manage the ventures as either inside directors or through positions on the Board of Directors. A single GP or venture capitalist will often actively manage five to nine ventures, in various stages of development and thus requiring varying demands on his/her time. In the past, the average amount of money managed by a single GP was about \$30 million, but with today's larger funds, a GP needs to manage more money (and invest in bigger chunks in order to maintain the same number of investments) or allow for more GPs. Larger amounts of money to invest also make early stage investing, which typically requires small amounts

¹⁴ Some parts of this section adapted from an MIT Sloan School of Management class on Entrepreneurial Finance, 15.397 Spring 2000, taught by Professor Simon Johnson and Professor David Scharfstein.

of capital and more hands-on management, less feasible and later stage investing more attractive.

Venture capitalists often look for some combination of the following criteria when evaluating deals:

- **Industry:** Timing in the industry is everything to the venture capitalist. Their sweet-spot is the industry in its adolescence, not at peak and not at the decline. This means that the venture capitalist must also be able to predict with success where the market for a certain technology will be heading.
- **The team and their vision:** The founding team of the venture is extremely critical to the venture since they will be running the venture and creating the value. If the team doesn't work out, the venture capitalist doesn't want to be the one left holding the bag and running the company. A team needs a combination of venture specific smarts, passion, and internal ability to attract the talent essential for success.
- **Innovation:** Essential to the mix is the product or new capability of value that can fill or create a need.
- **Market size:** Venture capitalists determine whether the market is fragmented or owned by a few large players. The dynamics of the buyers and seller are important. The total market size often must be in excess of \$1 billion with potential to own a large portion of it.
- **Product and defensibility:** Hardware, software, service, infrastructure, or ...? Determine if the product or service offers a defensible position with a patent or some other means of protecting the potential market share.

4.1 What venture capitalists care about

Venture capitalists are concerned about the following points when they provide financing:

- Getting a return high enough to justify the risk and effort of the investment, as well as the opportunity cost of an alternative investment with the same capital
- Ensuring that the capital deployed to the investment is being used in the best possible manner
- Ensuring the ability to achieve a “liquidity” event, i.e. being able to sell the company at the IPO or thereafter, or in a merger/trade-sale.¹⁵

4.2 Staged Capital Commitment (SCC)

Venture capitalists use staged capital infusions as a means of control over a venture. Capital is given to the firm in stages and often at pre-determined milestones, such as after a prototype. The reasons for SCC include:

- Reduces losses from bad decisions and thus mitigates risk to the venture capitalists
- Provides an incentive for entrepreneurs to achieve milestones and stay on track
- Provides a means for the entrepreneur to drive up valuation in the next stage
- Creates an opportunity to attract other investors in future rounds.

4.3 Syndication

Venture deals are often syndicated, which means that investment at a certain stage is shared between multiple venture capitalists. Usually the major investor in a specific

¹⁵ A trade-sale is venture capital term to note a sale to another company for cash or other asset.

round is called the “lead investor” and typically dictates how the deal is to be completed and who gets in to invest. The reasons for syndication include:

- Sharing the risk of the investment across several venture firms
- Gaining an extra pair of eyes for strategy and validation of the model
- Making a venture more saleable to the public markets because of the buy-in by others, as well as a stronger network of resources
- Increased bargaining power relative to entrepreneur in a sale or liquidation.

4.4 Pervasive network

Venture capital money is considered “smart money,” that is, capital that comes with strategic connections or what some call the venture capitalist’s “Rolodex.” The network is strategic in helping the new ventures with raising future rounds of funding, validation of the concept from established players in the industry, sources for marketing, technology, recruiting, accounting and legal services, perhaps a first client, a strategic relationship, and many other areas.

5 THE NEW ECONOMY INCUBATOR

5.1 Definition of an incubator

The word “incubator” has been widely used in the press to broadly refer to an organization that helps facilitate the creation of a new enterprise. Other terms that are often used interchangeably are “catalyst,” “facilitator,” “accelerator,” and arguably “venture capitalist” and “angel investor.” It’s all a matter of definition, and that seems to vary greatly.

Merriam-Webster’s [WWWebster](http://www.m-w.com) online dictionary states the following definition of an *in· cu· ba· tor* (date: 1857):

“One that incubates: as (a) an apparatus by which eggs are hatched artificially (b) an apparatus with a chamber used to provide controlled environmental conditions especially for the cultivation of microorganisms or the care and protection of premature or sick babies.”¹⁶

If we take this definition and synthesize it into new business lingo, I come up with my definition for incubators:

A controlled environment that fosters the care, growth, and protection of a new venture at an early stage before it is ready for traditional means of self-sustaining operation. In today’s world, where information technology and the Internet are normal parts of the business environment, the term “controlled environment” could be either physical (real estate and office facilities) or virtual (networks).

¹⁶ Merriam-Webster’s WWWebster <http://www.m-w.com/netdict.htm>

5.2 Incubator categories: defining terms

Generally speaking, incubators can be segmented into the following four categories with very amorphous lines between them:

- Venture Incubator
- Venture Accelerator
- Venture Portal
- Venture Network

In this study, the term “incubator” is used in its broadest definition to cover the full range of categories, unless used in other contexts or otherwise specified.

The figure below summarizes my research on sampled incubators.

Incubator Classifications of Sample Pool				
Venture Incubator	Venture Accelerator	Venture Portal	Venture Network	Total
28	20	2	2	52
54%	38%	4%	4%	100%

* Closing date of research being May 1, 2000
** Check www.chinsomboon.com/incubator for more statistics as they're being added, post-printing. More incubators, VCs, and other interviews are still being added.

Figure 5-1: Incubator Classifications of Sample Pool

5.2.1 Venture Incubator

A Venture Incubator is a full-service organization that provides everything a venture could need, including office infrastructure, access to a network of contacts, technology resources, human resources, operational expertise, legal, accounting, etc.

Examples are [CampSix](#), [Cambridge Incubator](#), [idealab!](#), and [eCompanies](#).

5.2.2 Venture Accelerator

Venture Accelerators are services firms that accelerate the process of starting a new venture. They provide consulting services to bolster the business plan, reposition, validate, bring to market, provide due diligence for a venture capital firm or other investor, and make available other for-hire services specific to a new venture. Like any consulting firm, they hope to leverage their broad base of skills, access to “best practices,” objectivity, and benchmarking in the industry as a rocket booster for new ventures.

Examples are [Intend Change](#), [Reactivity](#), and [McKinsey](#).

Also included in the category of Venture Accelerators are early-stage incubators that are really venture capital firms with active partnerships. These firms provide office space, some strategic assistance, and capital, all with the purpose of helping the firm accelerate. Equity requirements are similar to those of a venture capital firm.

An example is [YankeeTek](#). Other venture firms in this category and interviewed for this study remain unnamed since their announcements are still pending as of this writing.

5.2.3 Venture Portal

Venture Portals are online websites or extranets that create a network of entrepreneurs, advisors, and investors. These sites allow the entrepreneur to submit elevator pitches, business plans, and other criteria for evaluation by investors and/or seek assistance from advisors. These sites can help a venture contact local and global resources that may be beneficial in all aspects and stages of venture development. These sites may also create offline networking events in conjunction with the online network.

Examples are [NVST.com](#), [TheElevator.com](#), and [Garage.com](#).

5.2.4 *Venture Network*

Often seen as a mix between a venture capital firm and an operating company, Venture Networks invest and sometimes operate at later-than-seed stages, similar to post-second and –third financing rounds. These are often strategic investors for the new venture as well as for other ventures within the firm, with service arms that create network synergies among these investments.

Examples are [Internet Capital Group](#) (Nasdaq: [ICGE](#)), [Net Value Holdings](#) (OTC BB: [NETV](#)), and [CMGI](#) (Nasdaq: [CMGI](#)).

Figure 4 contains anonymous data as collected from my research. Identifying feature columns have been left out, including incubator classifications due to the small sampling of Venture Networks and Venture Portals.

5.3 Incubation industry

Incubators have been around since 1942, when Student Agencies Inc., in Ithaca, NY, began incubating student companies. In 1946, the first incubator outside the student community was created by American Research Development (ARD), started by [MIT](#) President Karl Compton and several [MIT](#) alumni to supply new enterprise capital to New England entrepreneurs¹⁷ -- ARD's first company was hatched in the basement of [MIT's Building 12](#), and it's second company in the area behind [MIT Building 10](#). In 1959, the Batavia Industrial Center (BIC) in New York state was a factory warehouse covering one million square feet that was purchased by Charles Mancuso and his family to create jobs

¹⁷ Merrill Griswold and Senator Ralph Flanders organized ARD in 1946. MIT President Karl Compton became a board member, MIT became an initial investor, and a scientific advisory board was established that included three MIT department heads. Later Professor of Industrial Management at Harvard, General Georges Doriot, was later asked to become president. Source: Charles A. Ziegler, "Looking Glass Houses: A Study of Fissioning in an Innovative Science-Based Firm," unpublished PH.D. dissertation, Brandeis University, 1982.

in the small farming town. BIC has been instrumental in the creation of more than 1,000 businesses.¹⁸

Since then, many similar establishments have been created, mostly as non-profit and not-for-profit incubators that were partnerships with local communities. Many were part of universities, research and development parks, and think tanks, organized to commercialize technologies and teach their students about the real world by giving them hands on experience. Many of the programs were offshoots from collaboration between the engineering and business schools of universities. The main goals of these organizations were (1) to teach and educate and (2) foster employment and development. Highlights from a survey published in 1998 by the National Business Incubation Association¹⁹ (www.nbia.org) are the following:

- NBIA identified 587 North American incubators.
- 45% of incubations are urban, 36% are rural, and the remaining 19% are suburban.
- The average year incubators began operation was 1991, with a range of about 1942 to 1998, with substantial numbers after 1985, and about half of all incubators since 1992.
- Most (43%) incubators are mixed use; another 25% are technology.
- Graduates and current clients of North American incubators have created nearly 19,000 companies still in business and more than 245,200 jobs.
- A high percentage of incubators offer a wide range of services, even in those areas of business assistance that are specialized.

Though it's debatable how an incubator is defined, some would argue that today's New Economy incubators were started by pioneers like [David Weatherall's CMGI @Ventures](#) in 1995, [Bill Gross' idealab!](#) in 1996, and much older firms and conglomerates like

¹⁸ Lawrence Aragon and Julie Landry, "How a farming town hatched a a new way of doing business." *Red Herring*, Jan. 19, 2000

¹⁹ "1998 State of the Business Incubation Industry" National Business Incubation Association. www.nbia.org

[Safeguard Scientifics](#) (NYSE: [SFE](#)) in 1980 (originally founded in 1953),²⁰ and [Thermo Electron](#) (NYSE: [TMO](#)) in 1956.²¹ Incubator or not, they're a different model from the typical venture capital model.

Following the successes of these firms, mid-1999 through early 2000 saw a flurry of other for-profit incubators that were set up with the purpose of creating more ventures in parallel, more quickly, and in return taking a portion of equity in the new venture as fees. Some would argue that taking more equity for services is a recent concept, but not facts don't bear that out. [Boulder Technology Incubator](#), though a non-profit, has always taken some portion of their fees in the form of equity ever since their inception in 1989, with that stake being transferred into a not-for-profit entity.

Tom Emerson, Director of the [Arizona Technology Incubator](#), uses the analogy of making pancakes to describe incubators: the first pancake never comes out right, and sometimes it takes one or two, but once you've got them down, the rest become a lot easier. This is the benefit of working with an experienced incubator; they've done it multiple times before. Of course, environmental circumstances of the stock market, user perception, market trends, and other factors all play into the interaction and makes each instance unique in many ways.

Today's new class of incubators aspires to help entrepreneurs by providing pre-seed, seed, and other early investments that have been traditionally offered by angel and early stage venture capitalists. They offer seasoned business guidance, connection to their coveted network of contacts, and the ability to take on the more mundane tasks of managing an office, acquiring computers, hiring, and payroll. Many claim they can shorten the time a startup needs to ready itself for a trade-sale or IPO. Here are some of what these new incubators offer:

- Efficiently complete the entrepreneur's model, giving validation and vetting

²⁰ "Incubating Success at Safeguard Scientifics," by Jim Seymour, special to TheStreet.com

²¹ Founded by the George Hatsopolous, a professor of mechanical engineering at MIT. Source: Hoovers.com

- Provide relationships to services, such as venture experienced CPAs, lawyers, strategy consultants, public relations, and brand marketing firms
- Provide experienced operations staff
- Provide for sourcing additional staff (human resources/recruiting)
- Fortify the knowledge base of the specific business as well as general business acumen
- Provide instant infrastructure (office, desks, computers, etc.)
- Give access to a networked community among firms
- Give access to a network of domain experts for all aspects of business, including concept validation and construction
- Provide technology to accelerate product development or support, including master relationships with strategic vendors like [Cisco](#) and [Sun Microsystems](#), companies not ordinarily motivated to deal with or adequately service any but large accounts.

Not only are incubators referred to by different names, so are their “incubatees.” They are known by terms such as “partners,” “clients,” “ventures,” “investments,” “startups,” and “members.” The incubators that have a defined and structured methodology seem to use their specific term more rigidly, while others with more flexible methodologies use various terms interchangeably.

The growing number of incubators in the New Economy represents a wide range of new and different organizational forms. This study attempts to identify and categorize these varied models not by rhetoric but by (1) their operating model and what they offer, (2) when they intervene in the venture creation process, and (3) any vertical segmentation. In addition, how these firms are capitalized greatly affects how they operate and the types of services they provide to their new ventures.

5.4 Operating models that span the spectrum

As presented here, there are a number of incubation models, not all whose founders always call them incubators. Whatever they call them, they are organizations that fit this study's definition of incubators:

“A controlled environment (physical or virtual) that fosters the care, growth, and protection of a new venture at an early stage before it is ready for traditional means of self-sustaining operation.”

Today's New Economy incubators fall somewhere on the spectrum of the four models outlined above. With many competing incubators coming on the scene, skyrocketing incubator IPOs, other looming IPOs, and a softening of the public markets toward technology stocks, many incubators are expanding into other coverage areas and taking on more than one model to capture both market and mind share.

In many instances, companies that were not initially incubators have collapsed themselves into a shell or holding company and now call themselves high-tech incubators. These companies may not even have been in a high-tech area. [CMGI @Ventures](#) (Nasdaq: [CMGI](#)) was originally a marketing firm; [Rare Medium Group, Inc.](#) (Nasdaq: [RRRR](#)), was originally an air conditioning manufacturing firm by another name; and [Jackpot Enterprises](#) (NYSE: [J](#)), was originally a gaming company.

5.4.1 Internal Idea Generation

Firms like [idealab!](#), [eCompanies](#), [NewcoGen](#), and others, a total of nine of the sixty-eight interviewed, are focused (currently or will be in the future) on developing a majority of ventures with their own internal ideas. These ideas can be those of the founder or founders, who may have a track record of being visionary and having led a number of successful offerings. In other cases, these ideas are defined by a select group of management that is creative, experienced with those in their field, and knows what the market wants.

Unlike a venture from external sources, these incubators must find and employ what venture capitalists call Entrepreneurs-In-Residence (EIR). These are people who can feel passionate about the project and adopt it as if it were their own creation, which, in many ways, it is because they've done the due diligence in fleshing out the business plan. Their hope is that these incubators' internal crystal balls are all seeing and truly visionary.

Many of these firms were either originally growing external ventures or are now seeking to supplement the internal with external ones. In the past, internal venture incubators have not always solicited for external ventures outright, but that is changing. Founders are realizing that their vision could benefit from the outside knowledge pool, especially when expanding into complementary segments as a new industry or extending their horizontal technology platforms into other vertical segments.

One of the original firms in this space is [Bill Gross' idealab!](#) based in Pasadena, California, founded in 1995. [Bill Gross](#) and his organization of idea creationists and implementers have had a few public successes and a few not-so-successful and is considered to have the closest thing to a track record of any incubator. Another firm, in the biosciences space, is [XL Vision](#), a [Safeguard Scientifics](#) (NYSE: [SFE](#)) investment, founded by David Scott, with projects being brainstormed by a group of nine founding partners. All considered "gray-hairs" in their field of bioscience expertise, they have been in operation since 1994.

A number of firms that have adopted models for accepting external business plans seem also to be incubating their own ideas or have plans to focus more of their efforts on building teams to brainstorm internal “home-runs.” This trend can be attributed to two factors:

- If ideas are internally generated and thus initially 100% owned by the incubator, the firm has a better possibility of owning a major share of a venture after outside investors syndicate the deal.²²
- The management of internally generated projects is less taxing on the organization than that of external projects brought into the incubator. External entrepreneurs tend to have their own drivers and incentives that may not always be aligned with those of the incubator.

²² Investment companies must ensure they don't qualify as a public mutual fund as is defined by The Investment Company Act of 1940, which governs them with very strict covenants, such as disclosure of their investments and organizational details in public filings.

5.4.1.1 Sample ideation model

From my interviews with incubators that did their own ideation, here's my depiction of how a generic model works:

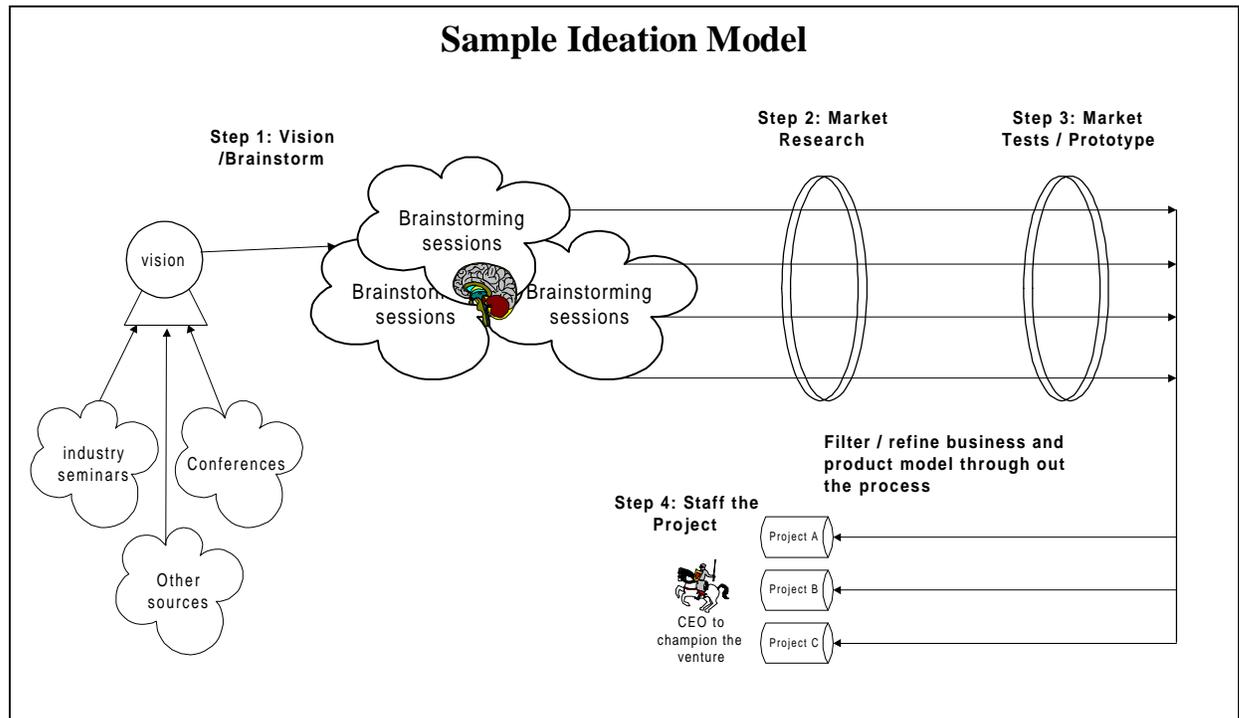


Figure 5-2: Sample Ideation Model

Step 1: Vision → Brainstorm. The founders and a group of partners brainstorm and/or also receive ideas from the incubators' other staff members. In the successful cases, these folks are tuned into the industry of their specialization, if any. More than likely, they have worked extensively in their industry.

Step 2: Market research. For the most promising ideas, a lead is assigned and does some market research. These ideas are then filtered to a handful of manageable options.

Step 3: Market Test / Prototype. In the many cases of experienced incubators, a prototype is built and tested in the marketplace. In the case of a medical device, the incubator would work with alpha-site hospitals to test out the product. In the case of an Internet site selling widgets, incubator staff would buy widgets and sell them online as a test. The results are evaluated and the projects then narrowed down to the ones determined to have the greatest potential for being a “wild one” or a “winner.”²³

Step 4: Staffing. A full startup team is assembled from within the incubator, including an Entrepreneur-In-Residence (who will likely champion the deal initially), as well as work with folks recruited directly into the venture. In many cases, the venture is fully staffed with incubator resources with additional outside resources hired upon the next round of funding.

5.4.2 Educational Institution and Community Development

Educational institution and community development incubators are typically non-profit and not-for-profit organizations that are either part of a university or local community or are located in areas that face economic challenges, such as neighborhoods that are deteriorating, disadvantaged, or have high unemployment. A common goal these organizations have with each other is that they're focused on teaching the entrepreneur and, in some instances, the community about how a new venture works—everything from ideation, business plan creation, financing, staffing, networking, execution and operations, and other areas vital to a startup.

5.4.2.1 A service of the university

Incubators that have some relationship with a university are often there to help commercialize strategic technologies that were developed in a research laboratory or to help business minded students bring their own ideas to market. An example is the

²³ Terms used by venture capitalists to signify a significant windfall investments. “Wild ones” are rare and seldom seen in venture capital portfolios. “Winners” are more common and are considered well-known IPOs of companies that are still household names after the IPO.

Rensselaer Polytechnic Institute and Science and Technology Campus at Ohio State University.

There are two main types of university incubators, one “with walls” and one “without walls.” With walls is a typical incubator facility that is fully enclosed—the typical kind that you and I think about. An incubator without walls is an environment that fosters the building of ventures by the sheer fact of having a physical community and a knowledge trust. Star examples are technical universities like [MIT](#) and [Stanford](#). Without wall incubators draw in venture capitalists, smart people, and all the other entities required to commercialize technology, mostly by name brand alone.

5.4.2.2 A service to the community

University incubators serve the community, but incubators can also be created with that purpose in mind: to build the community by fueling innovation in the local work force, and create self-sustaining commerce, jobs, and a more productive social living environment. Examples are [Boulder Tech Incubator](#) and [Arizona Technology Incubator](#), both of which have relationships with their local universities ([University of Colorado](#) and [Arizona University](#)). These types of incubators are supported by public works firms, local and state governments, private firms, philanthropic organizations, and individuals.

5.4.2.3 The common service of teaching

Both types of incubators foster programs that in many respects resemble a fast-track MBA or business school program. These programs range from the nuts-and-bolts of creating a business plan to Porter’s Five Forces²⁴ to balancing a checkbook. Many times these programs are done on a *pro bono* basis by well-known brand-name firms with local branches as well as community companies that provide services that can be useful to the new ventures.

²⁴ Michael Porter’s Five Forces is often taught in business schools as a tool to analyze an industry and its constituents.

Very often these community incubators provide no staff to act as operators within the ventures, just teachers and coaches. This is why teaching is so imperative to these organizations; it is a way to ensure the venture can stand on its own once it leaves the incubator.

5.4.2.4 Other commonalities

Some of these organizations are changing and shifting their models to accommodate the possibility of taking equity in their ventures like for-profit incubators. Unlike for-profit incubators, these organizations typically take a much smaller percentage, much like an inside director would assume.

One such community incubator that is partially funded by the local community and is also establishing more formalized ties to a university is the [Boulder Technology Incubator](#) in Boulder, CO. Since inception in 1989, this incubator has taken equity stakes in its firms to supplement any other fees as well as public funds and private donations taken as a non-profit organization.

When sourcing deals, these community incubators typically look for a more complete management team with a fully rounded set of skills than most of the for-profits that try to augment their teams. The reason is that these incubators take in ventures and hope they are able to be self-sustaining from Day 1 by teaching the management team and providing the right resources.

These incubators typically have little staff, fewer than five per location, with only one or two dedicated to management duties such as sourcing deals. The rest are usually support staff. In every case researched for this study, an experienced business manager acted as Director and offered the incubated firms business advice on an as needed basis, usually non-regular and non-formal.

To assist each of the incubated companies, many of these incubators form teams for individual ventures. The teams, composed of experienced community entrepreneurs, work on a *pro bono* basis, without expectation of payment or options but often do get them in the end. These teams help foster every aspect of their incubated firms and are considered pivotal to the firms' survival.

Either as a community or university incubator, there are two sub-categories of these types of incubators:

5.4.2.4.1 Equal Entry

Equal Entry incubators serve all entrants equally and on a first-come-first serve basis. Since there is no judgment or differentiation in terms of selection, these types of incubators tend to be favored by firms that normally wouldn't have been funded due to a higher level of risk or uncertainty but which may still prove to be worthwhile investments later in a firm's lifecycle. This doesn't necessarily mean that the venture would have been a bad investment, just that the potential of a product or service can't be clearly seen on the quickly changing horizon. Many times the venture will be evaluated solely on the basis of whether or not it already has adequate financing before allowing it to apply. Companies that enter these incubators need not be seed stage ventures but often are.

The Incubator at [Northwestern University](#) is an example of an equal access facility and, as such, has a wait list for entrants due to demand that is greater than the space to house them all. In this case, rent is also about 25% above market rates, which signifies that these firms are not entering to be subsidized but rather to gain benefit from actual or perceived value of any combination of or all of the following:

- Association with the university
- Access to university resources unavailable to outside startups
- Value from the incubator itself, such as proximity to others, shared learning and resources

- Infrastructure support
- Mentorship and other consulting services.

5.4.2.4.2 Selective Entry

Selective Entry incubators sometimes operate on an application and selectivity process. These incubators have a defined selection process and look for the same criteria as venture capitalists do and, in many cases, require a complete business plan that can stand on its own two feet.

For instance, entry into [Boulder Technology Incubator](#) is competitive, with an admission rate of less than 10% from those applying each year. The admission rate for [Arizona Technology Incubator](#) is only 1 out of every 25 applicants, with a selection process that might extend to as long as two months before a decision is made by the 24-member committee board.

5.4.3 *Made- to-Order Office and Expertise for Hire*

These outfits are typically created by office and real estate management facilities and offer any operation an office with shared resources, such as reception and lounge areas, reception and other support staff, fax/copy machine, conference rooms, restrooms, telephone system, and every other office convenience for either a higher per-square-foot rental fee or a separate shared common area fee. Other services such as legal, accounting, recruiting, etc., can be hired for a fee and typically arranged beforehand on an as needed and preferred basis.

The advantage for the entrepreneur is that s/he can have an instant office in no time flat. From this perspective, any office building with spare rental space can become an incubator. The value-added for the entrepreneur is the “instant-on” feature. While the infrastructure is valuable, the question remains whether more is necessary for the entrepreneur creating a startup.

5.4.4 Funnel and development for pre-venture capitalist deals

A few incubators actually see themselves as service entities to their larger brethren, the venture capitalist. These incubators are often just a service line of the venture firm and serve to *only* incubate companies that have already gone through a preliminary and early stage selection process by the venture firm. These incubators are seen as a necessary cost center and exist primarily to capture a potential wild one at its earliest stages of development. An example is [E-Start](#), a part of Vesta Group, a venture capital fund.

Many of today's top-tier venture funds are raising money in the billions of dollars, which become unmanageable unless invested in large chunks. This makes early stage investment infeasible for venture capitalists and creates a need for incubators, which can more effectively manage seed stage investments. That smaller amount of money invested at early stage compared to the same amount of money invested in a later stage deal carries the potential for much larger returns.

Though initially these incubators were seen as a service arm to their venture capital firms, they are pondering the idea of other models that may prove profitable and may capitalize on the hot IPO market.

5.4.5 Fortune 500/1000 Spinouts and Spinoffs

The popularity of incubators and high-technology ventures in the public equity markets has been inspiring the Fortune 500/1000 to adopt different business models. Often, these models are similar to the internal venture models that many firms have tried to implement in the past, some successful and some not. Many of these Old Economy firms' appeal in the dot.com spinoff is to get Internet-like valuations and, at the same time, revitalize their own business model. Examples of incubators that have partnered with Fortune 500/1000 firms are [Boulder Tech Incubator](#) and [Internet Capital Group](#) (Nasdaq: [ICGE](#)).

The drivers and incentives for this internal venturing are numerous:

- Old Economy firms gain Internet valuations.
- Many of these spinoff firms support the core business of the Old Economy firms and thus are clients.
- Old Economy and spinoff firms share in the upside of the new ventures.
- Some of the internal ventures could be the future of the Old Economy firms.
- Employee retention for the Old Economy firms is higher.
- Hard-to-replicate Old Economy resources are available to support innovation.
- Synergies to the core business of the Old Economy firm are created.
- Disruptive technology²⁵ promotes action—“if we don’t do it, someone else will.”

5.4.5.1 Fortune 500/1000 partnering with and becoming incubators

In the past, there have been a handful of notable examples of Fortune 500/1000 companies that have partnered with non-profit incubators to develop their own internal incubators. It’s only logical, since many of these firms were and are financial supporters of those same local community incubators. For instance, [Internet Capital Group](#) (Nasdaq: [ICGE](#)) has announced a partnership with [DuPont](#) to foster their internal spinoffs.²⁶

For many firms, this type of internal venturing is difficult to manage correctly. A recent study on [Lucent Technologies’](#) New Ventures Group²⁷ finds the following: (1) financing new technology ventures through corporate venture capital is hard, (2) there are more failures than successes, (3) some of the problems that firms encountered were due to

²⁵ A term often used in reference to Harvard Business School Prof. Clayton M. Christensen and his book, *The Innovator’s Dilemma*.

²⁶ Internet Capital Group, press release, Feb 18, 2000

²⁷ From a study by Henry W. Chesbrough of Harvard Business School and Stephen J. Socolof, Vice President at Lucent, titled “Creating New Ventures from Bell Labs Technologies,” March-April 2000, Industrial Research Institute, Inc., Research Technology Management.

structural problems, but (4) some of the problems were the result of how the programs were managed.

In addition, many Fortune 500/1000 firms have developed venture funds and, in many instances, have become a powerful force in the venture community. Investments by these firms into ventures give valuable validation to the operating model that holds water in the public markets.

A handful of Fortune 500/1000 firms have set up separately run subsidiaries to incubate external ventures that apply to become part of the incubator. One in particular, the Panasonic Internet Incubator in Cupertino, offers office space priced under-market,²⁸ inclusive of high-speed Internet and shared facilities, and select ventures that are in some way synergistic with other incubated ventures or to its parent [Matsushita](#) (NYSE: [MC](#)).

5.4.5.2 Services firms are incubating

Just about every top-tier investment bank and consulting firm has developed its own venture services business unit as well as incubator, to incubate internal ideas or those of clients, whether new ventures or investments of other venture capital firms. Examples are [JP Morgan](#), [Citibank](#), [McKinsey](#), and [Andersen Consulting](#).

These services firms are able to dedicate internal industry experts and leverage considerable strategic resources of the entire organization, including established offices and contacts in many local and international markets. Like an incubator going global, many of these firms are already global but retrofitting incubators into those offices.

5.4.6 *Another investment in the portfolio (deal source)*

Today's economy presents unprecedented amounts of capital at surprisingly cheap rates. Capital is a commodity. That being said, there is a need to effectively deploy it, manage

²⁸ As is currently offered (though this may change when their lease is renewed later in 2000) and taking into consideration the drought of available office space in Silicon Valley.

it, and—one hopes—reap sufficient returns. Those with capital are accepting an increased level of risk and investing in the portfolio approach that incubators provide, many for the reason that they cannot get into a venture capital fund.

A growing number of venture capital firms are either investing in incubators or partnering with them, with even more still considering which route to take. In the end, many will end up deploying their massive amounts of capital to incubators in the hopes of finding a wild one. To take the Hollywood analogy of Aaron Cohen, founder of [Concrete Media](#):²⁹ Incubators are not hoping to find a Harvard dropout like Ben Affleck, who now commands a whopping \$10 million per movie, for a good flick. Incubators are looking for another emergent star like *The Blair Witch Project*, that so-called diamond in the rough. The questions that emerge are how many of these deals can one expect to find? Is investment in this deal source a better alternative than investing in a source with a clearer chance of success?

5.5 Services offered

Part of the value that an incubator brings to the table is in the services it offers. How much value is in those services and whether or not they could be obtained elsewhere at a lower economic cost to the venture is debatable and will vary based on factors such as market conditions and geographic region.

5.5.1 Infrastructure

5.5.1.1 Instant office

The “instant-on” office provides services like fax, telephone, desks, chairs, computers, network, conference rooms, etc. More important, they offer they offer the new startup proximity to other startups that might be going through similar growing pains. The ever popular water-cooler discussions are a time honored and valuable source of networking.

²⁹ Concrete Media is not in the business of incubation but rather is a firm that is hired by firms (startups or otherwise) to create Internet businesses for a fee. They have no equity model yet.

5.5.1.2 On staff resources

On staff resources are experts in their respective fields of recruiting, marketing, engineering, operations, and finance. With today's hot technology market, professionals in these fields are a sought-after commodity. Finding one who will help your startup as needed isn't easy and, once found, certainly isn't cheap. Incubators may instead hire these experts on staff with incentives to help the incubator's ventures through the offer of a direct share in those ventures.

5.5.1.3 Software and contracts as "stock" items

The backend office and other "soft" items such as contacts for employment, non-disclosure agreements (NDA), stock options, etc. are fairly standardized across ventures. Many incubators provide these as "stock" services.

5.5.2 *Partnerships*

Many of the incubators have developed so-called partnerships and affiliates. For any incubator—and especially ones without a track record—partnerships are essential. These partnerships signal that the management and founders of the incubator truly have the Rolodex and relationship capital to convince a top firm to give them their seal of approval. After all, their network will be that used for the venture itself. Additionally, these established relationships help to shave off valuable time in negotiating individual contracts for ventures.

Firms that are often referred to as affiliates and partners can be other incubators, venture capital firms, or other professional services firms, such as investment banks, law firms, accounting firms, consulting firms, and others.

5.5.2.1 Affiliates

The term “affiliates” is typically used to indicate a more formalized relationship, either an investment or equity stake in the other or some preferred sharing of deals in seed or syndication.

5.5.2.2 Partners

Oftentimes the term “partner” (when not used to refer to the venture) is used to refer to an affiliate. More typically, it’s a lesser relationship, in which there may be a verbal agreement between senior executives or a “preferred” status as client.

On many occasions during research for this study, incubator founders would note that a certain firm was a partner (and would be listed on the corporate website as well) but was revealed through deeper research as the incubator’s service firm, much like that of any provider and their client. Following up on this misleading representation, incubator founders answered with the stock “we don’t discuss details,” an immediate signal indicating that there isn’t much substance to the relationship. In the same vein, there were a number of instances in which some of the same top firms in their industry were referred to as partners by multiple incubators.

5.5.3 *Technology*

5.5.3.1 Technology playground and lab

Frequently a high-technology venture’s major hurdle is that it can’t afford the testing and programming equipment, hardware and software required to begin creating their product. Incubators can provide for these tools and services, especially those focused in certain areas of specialty. An incubator with a vertical focus can leverage use of a single lab across multiple ventures.

5.5.3.1.1 Managing intellectual property

Potential cannibalization of intellectual property among incubator tenants is a concern with real basis. If not managed properly, the proximity to other startups and the water cooler network can become a danger rather than a positive.

Since non-profit incubators have been around much longer than the for-profits, those that I interviewed didn't find cannibalization a problem. The startups were usually too busy developing their own business; there wasn't much time to mingle casually in the first place. There is also a level of entrepreneurial respect for each other that helped the startups transcend IP issues.

5.5.3.2 Technology building blocks

All but a handful of incubators provided some sort of technology backend, platform, or methodology that would help accelerate the development of a website or service, facilitate e-commerce, or promote some other integrated Internet technology. [eHatchery](#), for example, has developed an open source eBusiness Java platform called [Hatchware](#)³⁰ which has been placed in the public domain.

Internet infrastructure firms like [CommerceOne](#), [Ariba](#), [Oracle](#), and [Neuvis](#) encourage use of their products by incubators to develop vertical and horizontal Internet services. A few are invested in incubators and/or in some way incubating companies themselves.

5.5.3.3 Domain expertise

Domain experts are professionals who have the brand name and clout within any vertical industry, such as auto parts manufacturing or beauty products. They can be part of the overall team that analyzes and manages a deal and serve on the Board of Advisors or an Advisory Committee. One of their main assets is having the right network of relationships in their industry of expertise. For example, an expert in the service operator

³⁰ www.hatchware.org

telecommunications industry would know how to market to telecos³¹ for telecommunications related projects.

5.5.3.4 The geek trade

An area that is often lacking with many ventures is the ability to find, attract, and keep key technical staff. Having been a former engineer myself, I call this the geek trade. In spite of the name, these people are some of the most highly prized assets of any venture. These technical experts can be immediately deployed to a startup venture to accelerate the venture out of the starting gate.

Many incubators are gearing up staff in the hot areas of wireless, telecommunications, and application server programming (ASP) having concluded that many of tomorrow's successful businesses will need some form of those technologies as either an adjunct or main focus. Staffing spans the spectrum from management to the real value-added programmers who can implement plans from the technical aspect. This strategy is applied to web development but could also encompass other software development. A growing trend is outsourcing the implementation.

Unless an incubator is focused in the biotech, hardware, or other "hard" ("non-soft") industries, having staff technical domain expertise in these areas will be hard to justify.

5.5.4 *Recruiting and Human Resources*

As with technical staff, senior level recruits are especially difficult to find. One of the most important resources cited by every incubator founder interviewed was a recruiting relationship, either through an outside agency or in-house recruiter. Every aspect of sourcing people, from high level directors to executive assistants, including handling compensation and option packages, was offered. The hardest executive to pitch? A potential Vice President of Engineering.

³¹ Teleco is a term in the telecommunications industry that refers to the phone company or telecommunications/network operator. Examples are [Vodafone](#), [AT&T](#), and [Verizon Wireless](#).

5.5.5 “Been-There-Done-That” Expertise

Many incubators were started by people who have a track record and can be seen as the “gray-haired” folks of their respective industries. There are other incubators that may not have the benefit of such a track record in their founders but are in the finance trade and/or were able to raise the funds necessary to start an incubator. These incubators are heavily recruiting the gray-haired folks onto their teams.

“One way to move faster is to learn from people who know how to keep up. What follows, then, are provocative insights and hands-on techniques from speed demons of the dot.com economy.”³² Executives with a track record are valued by incubators, who can benefit from the voice of experience on the incubator’s ventures, much like the perspective of a grandparent imparting wisdom to a grandchild.

Often these operations, marketing, strategic, and recruiting experts come from Old Economy firms and were drawn into the incubator for reasons similar to those that others leave for startups, or they were presented with what they perceived as a great opportunity.

5.5.6 Brand Name

Even though name brand is not a service *per se*, there is a premium paid for being associated with one. Typically that’s another hit in equity of the venture.

Branding, in a way, is also a service that is being offered by an organization. The costs of doing business with such an organization should be taken into consideration by any entrepreneur.

Some of the visionaries interviewed noted that success breeds success. They expect that the filtering process of a firm will be rigorous and that the screen for good deals works.

³² “How to Speed Up Your Startup,” *Fast Company*, May 2000.

They also agreed that firms and processes are not infallible and that there is variance among deals.

5.5.7 *Community—Network of Contacts*

One commonality between these models is that all are focused on using and developing a network of companies, contacts, and complementary products and services that can be used to help one another within the network. The classic term for this is *keiretsu*, a Japanese word often used by [Kleiner Perkins Caufield & Byers](#). Other derivations with similar meaning are *netbatsu*, *seibatsu*, “community,” “collaborative human capital network,” and “social capital,” among others.

An incubator should also foster the internal networking of companies within the physical and virtual space of the facility. Arthur Nelson, a commercial developer of office parks located along Boston’s Route 128 technology highway (a major corridor housing venture capitalists, technology firms, and startups) notes that in the early 1980s, his incubator tried to foster both a physical network as well as virtual one³³. He found that only the virtual one still exists in some form today, as a tightly knit network of those sharing experiences.

Many of the incubator executives interviewed cited the value of social events, what some firms called the TGIF beer bashes. These were great opportunities for the incubator community, inside and out, to get together and discuss the week’s activities in a less pressured atmosphere. These events create a good source of networking in the incubator community.

5.6 How deals are sourced

As was mentioned above in branding, the way deals are selected and sourced plays into the branding of all involved. A venture that comes out of an organization is branded as

³³ Incidentally, Mr. Nelson’s incubator failed, though without learning many lessons in the process, and perhaps an omen for some New Economy followers.

that organization's offspring and is thus seen as having passed their screening process. An incubator known for practicing rigorous due diligence will lend ongoing credibility to deals that pass muster as well as building its own high standards. This quality benchmark will have positive effects in a deal's later rounds of funding.

A deal may originate with an organization's network of affiliates, including venture capitalists, Fortune 500/1000, or top-tier business schools. The source of a deal and its original referrals has great impact on the deal's later reception by potential syndicating investors.

5.6.1 Internal ideas

Deals may be sourced entirely from the inside with an individual or groups of smart and experienced people who brainstorm ideas, research them, tear them down, and brainstorm more. A handful of firms started out this way and don't explicitly take business ideas from the outside, but those interviewed noted that a good deal was never passed up. Some of these firms are now more open to seeking business ideas from the outside, though still not explicitly. Other firms that weren't initially dreaming up their own ideas are moving in this direction either because they see a market opportunity for a certain product or service or they want to own more of a venture for reasons of equity or compliance with the Investment Company Act of 1940,³⁴ avoiding potential difficulties when they take the incubator entity to the public markets.

5.6.2 Network Referrals

Incubators that do take business plans from the outside find that the quality derived from their network of service firms, friends, friends of ventures within the incubator, etc., were of much higher grade than those that came in without a reference. In a way, this signifies a type of pre-screening and selection process that filters the notable from the unremarkable who may not have the wherewithal to be a successful entrepreneur or

³⁴ There have been exemptions made to this rule, mostly due to the ability to justify the incubator not as an investment vehicle but rather as a services firm.

business idea. “The competitive arena has a social structure: players trusting certain others, obligated to support certain others, dependent on exchange with certain others, and so on.”³⁵

Like the venture capital business, many incubators focus on the individual or what Neil Weintraub of 21st Century Ventures calls the “organization,” which could be one or more individuals. The organization is evaluated for its merits and sometimes aside from the business plan, though of course there is an obvious relationship between a good business plan and a good organization. When an organization comes through the network, that reference is important as others form an opinion of the merits of the opportunity.

Many incubators would rather work with an “A” team and a “B” business plan that can be turned into an A plan, than start with a B team and an A plan. The logic is simple. In the end, a startup’s success has a lot to do with execution, and that’s done by the organization, either as it stands at inception or after it’s fortified with help from the incubator.

5.6.3 *Web Interface / Form*

Many of the incubators have a web interface form specifically programmed to accept external business plans, distilled into either one or more pages so as to make evaluations more standardized and streamlined. Some even take business plans by email submission. All incubators in the press have a web interface and publicly listed email and receive a large number of business plans, ranging from several a day to 100+ a week.³⁶ Most websites and email addresses are programmed with automatic email responses when a submission is made. The response usually notes that the submission was received and will be reviewed in time and often begs patience due to the volume of submissions the incubator has to wade through.

³⁵ “Structural Holes, The Social Structure of Competition,” Ronald S. Burt, 1992, Harvard University Press, page 11.

³⁶ Ranges will vary and are often based on self-selection and adverse selection.

General submissions that come through this interface tend to be of lesser quality than those by referral. Two incubators researched routinely direct entrepreneurs to their websites, where the entrepreneur finds a form slot where they can note who referred them. This was true even for entrepreneurs whose business plans came through a network referral. This uniformity helps to manage the constant flow of business plans.

5.6.4 *Business Plan Competitions*

Many incubators already have a university as a partner or have some involvement in the many business plan competitions at various business and technical schools. Once such example is the [MIT 50K](#) Business Plan Competition that has a large number of speakers, sponsors, judges, and other partners, who are involved in incubators, are venture capitalists, or are other notable investors. The [MIT 50K's](#) purpose is multifaceted. Besides being a good academic exercise, it is also an excellent method for participants to gain exposure to the venture community. With a great number of success stories from the [MIT 50K](#), including the creation of many billions of dollar in total market capitalization over the years for firms that have come out of the competition, venture capitalists and incubators alike stalk the [MIT 50K's](#) official website³⁷ to find great innovative ideas and concepts, competition winners or not.

Many of these incubators, even those that are part of consulting firms or Fortune 500/1000 firms, are even running their own business plan competitions in the hope of finding good deal flow for their endeavor. Because these business plan contests are typically focused on and advertised at select venues (like top-tier business and technical schools), these might be good opportunities for many potential entrepreneurs (though perhaps not for the general public since they never know about them) to gain additional exposure to capital and other means.

³⁷ <http://50k.mit.edu>

5.7 How deals are evaluated

Many of the firms interviewed for this study noted that they had a “special way” of evaluating their deals and separating the wheat from the chaff. Many of these firms called it their proprietary methodology or technology and positioned it as one of their differentiating factors from other incubators. Supposedly being proprietary³⁸ to many, they’re not presented here, but arguably, one would question whether these frameworks are or are not a sustainable advantage.

Generally speaking and without violating any disclosure of proprietary technology, the following is simply a generic method of how business plans are evaluated. The process outlined somewhat resembles, if not wholly resembles, the same methodology of any venture capitalist of whom I’ve yet to meet one who would call their method a sustainable advantage or even proprietary.

Step 1: One or more analysts, associates, or partners review the business plan and seek to rate it based on the incubator’s or venture capitalist’s criteria for market size, product, industry, founding team, etc. Sometimes one person can reject the plan, and sometimes it will go to more than one person for a review. These initial screeners range from those with some business acumen to the most experienced members of the organization. If the plan passes this test, then go to Step 2.

Step 2: A committee might review and conduct background and market research before moving to Step 3.

³⁸ Many of the firms I interviewed noted that amongst many other things, their methodology of reviewing business plans and working with teams was “proprietary”. In contrast, how venture capitalists review business ideas is no secret and widely known. So why the secrecy? Again, perhaps something about sustainability and real advantages.

Step 3: The entrepreneur(s) are invited in for a 15-20 minute stand up presentation, typical of a venture capitalist's presentation. In attendance would likely be the committee in Step 2 (if there is one) or the most senior members of the firm. They vote, and sometimes it only takes one convincing veto to shoot it down. If it passes, on to Step 4.

Step 4: More background checking and market research may be conducted as part of the due diligence. If the due diligence is a "go," then a term sheet is put on the table and discussed with the entrepreneur(s). If seed financing is involved, that is discussed at this point as well. Again, negotiations are much like that with a venture capitalist, and the term sheets are very similar (and often identical except for the numbers) in most cases.

Most of this total process can be accomplished in less than a week. Non-profit incubators can be just as fast but can sometimes take up to two months (depending on how often the committee meets and when the plan is submitted), which is more the exception than the rule.

Some of the criteria used by incubators closely resemble that of venture capitalists, such as:

- Addresses a market need
- Positioned in a large and fragmented market with potential for market leadership
- An "A" founding team—intrinsic leaders for the New Economy
- Ability to build a business worth more than \$1 billion
- Defensible technology

5.8 The "green" and "politically correct" incubators

Some incubators are founded by successful entrepreneurs who have already made their marks in the world of high net worth. These individuals are really looking to incubate in order to help other (1) entrepreneurs and (2) the local community, while ensuring a healthy return in the process.

One incubator interviewed, [eHive](#), actually has a mandatory rule that their ventures must set aside 5% of their after-tax profits (yes, there must first be profits) for charitable and local organizations. “Local” is the key value and to developing the local community the goal. They’ve termed this “venture philanthropy.”

5.9 Point of intervention

Incubators differ by the point in which they “intervene” or get involved with a startup. Many incubators are seeking to fill a perceived market need. However, most ventures begin with an idea source whose application may not yet be apparent or realized. These early stage ideas are often developed by a single person with deep domain expertise, a specific technical skill, or other asset. The incubator can help develop the idea and flesh out the possibilities.

Obviously the levels of potential returns and associated risks differ with the stage of intervention. Generally speaking, there is the potential for higher returns at the earlier stage of a deal, when investing in the deal is cheaper (requiring the same amount of equity at a lower cost). At the same time, the earlier the investment, the higher the risk, since the venture isn’t as well formed as it could be in later stages.

I created the following diagram using my definition of an incubator to help to illustrate when these organizations typically intervene in the creation of a new venture.

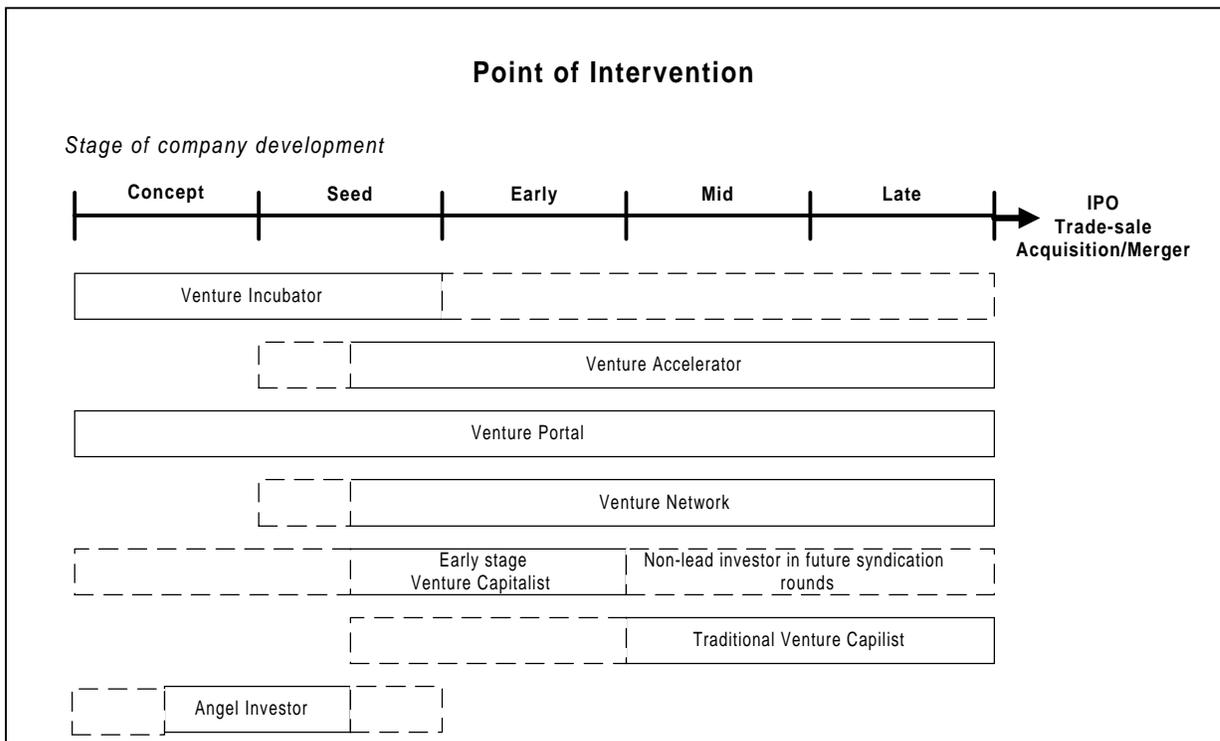


Figure 5-3: Point of Intervention

5.9.1 Idea Generation / Conceptual

The idea generation and conceptual stage is the earliest point at which an incubator would get involved. But it's also not unusual for an incubator, and even a venture capitalist, to have regular meetings with technologists or scientists from top-tier technical universities to bounce around ideas and concepts that use a patented or pending-patent on developed technology that is malleable or has many potential business applications. At this stage, there is typically no commitment from either party for resources or equity.

5.9.2 Seed

The seed stage is typically the point when an angel investor would become involved, but many venture capitalists will also enter at this stage. Typically, the purpose of the seed funding is to take the initial business plan to the next phase. This refinement is

accomplished by taking the plan to the contacts in the Rolodex to get validation, seeking input from those in the field, or producing a prototype. At this juncture, the incubator or venture capitalists will take them into their offices. Most incubators get involved at this point.

5.9.3 *Early*

Early stage typically refers to the first round of professional or institutional money, often referred to as venture capital. This stage has traditionally belonged to the venture capital community.

Typically, incubators that get involved at this stage are those that have no co-investment fund and don't provide any seed funding. Often, these are the top-tier consulting firms that have an incubator service arm, and many will only work with those funded by a top-tier venture capital firm. These firms will typically take some form of equity and cash in exchange for their services, which could include office space and other shared resources.

5.9.4 *Mid, Late, Mezzanine, Bridge*

Later stage incubation, which could be take place from the second round on to the mezzanine round,³⁹ are often “network,” “synergy” and “financial” plays. An investment in these startups is made for several reasons, including:

- Potentially strategic to the other investments of the incubator
- Provides a horizontal platform to incubate other ventures within the incubator
- “Guaranteed” financial gain due to market conditions
- Provides an entirely new area/industry that is strategic to the firm

Like early stage investing, this stage has traditionally been the mainstay arena of the large venture capital funds. Investments by Fortune 500/1000 firms are also common at this stage and again may be driven by the same reasons that motivate the incubators.

³⁹ Call the mezzanine round because it's the round just before the IPO and usually just enough to hold it over until the IPO.

Investments in this stage, relative to seed and early stage deals, are less risky, though as is the case with any startup, risk is still a factor, especially when compared to more established firms.

As a matter of public record, [Internet Capital Group](#) (Nasdaq: [ICGE](#)) is this type of investor; some would even call them an incubator. ICG does have a new subsidiary called [eColony](#) that is a true seed incubator.

5.10 Vertical specialization

Incubators that have an area or areas of specialization are becoming more prevalent, especially as new incubators increasingly become part of today's national press coverage. Mixed use incubators are also becoming more specialized and/or defining areas in which they are developing deeper domain expertise, not just technically but also with the requisite "gray haired" advisors who know the space from a marketing, operations, partnership, and full Rolodex perspective. An area of specialization is a vertical play (e.g. wireless telecommunications or biotechnology) not to be confused with horizontal play like those in B2B⁴⁰ or M2M,⁴¹ which are really very broad and can cover many domains or verticals.

There may be several reasons why this pattern is emerging:

- **Domain expertise of the founders:** The founders' own background in a certain domain will always dictate an area of focus for the incubator. The experienced founder inevitably has the right Rolodex of contacts to help a new venture in that particular domain.
- **Upon realization:** For mixed use incubators, founders are realizing that shared services like office space, fax, phone, etc., are not sustainable advantages. Rather, the operational expertise of the founders is the real value. These are sustainable, non-duplicable experiences and thus not very scalable.

⁴⁰ Widely used term to refer to business-to-business commerce, similar to wholesale.

- **Hot area:** Some incubators are hot to focus on an area regardless of prior experience. Once such example is in the field of wireless.
- **Area of distinction:** An area of uniqueness gives an incubator distinction and may even prove to be a greater draw when a new venture is deciding between this incubator, another incubator, and perhaps even a venture capital firm (provided the strengths of the incubator are obvious in the domain).
- **Low hanging fruit (for now):** Capturing untapped verticals is easier (for now). High-technology and even the Internet still have not tapped into a number of niche verticals. New ventures in those domains may be able to capture a significant percentage of that market space quickly.

Vertical incubators are likely to have a technology or play lab within the incubator. This is a major benefit of a vertical that can give significant advantages to a startup. A concern would be potential cannibalization of intellectual property between incubator tenants, if not managed properly. The proximity among tenants and water-cooler effect play a reverse role here.

Vertical incubators are forming that solely focus on one the following areas of wireless-telecommunications, biotechnology, media and entertainment, retail, and others. Depending upon an entrepreneur's focus and geographic region, vertical incubators may offer a strong enough value proposition to draw away startups from going to a venture capitalist in the first place, thereby actively going against adverse selection.

5.10.1 A Vertical Incubator in Wireless Telecommunications?

Wireless telecommunications is a good example of a hot and trendy industry that is garnering a lot of attention, both for its novel application potential and for its rapid rate of worldwide adoption. Examples are [IdeaEdge](#), [Ignition](#), and [3Com's](#) internal incubator.

⁴¹ A new term used in McKinsey's New Economy presentation given by John Hagel on April 5, 2000, at the University Park Hotel @ MIT. The term refers to "markets" (e.g. comprised of the top three car companies) doing business with other "markets" (e.g. comprised of the top three auto parts manufacturers).

5.10.1.1 Stodgy and rigid

The industry itself is fairly stodgy and rigid. Many of the telecommunications network operators, for example, for a long time operated under the protection of government regulation. Even though the U.S. market deregulated all the way down to the local markets, many of their counterparts in the international arena are still protected by their governments. Getting into one of these international firms without the right contacts can be very difficult and getting them to adopt new applications and services can be even more of a challenge, though this is certainly changing as they have to compete in the New Economy.

5.10.1.2 Having the right connections

These rigid firms are sometimes very large organizations that still have the “old boy” network attitude. An incubator that has the right contacts with the right telecommunications network operators, services firms, and manufacturers, could be a very valuable asset to an entrepreneur focused on this industry. Often, these partnerships will make or break the venture.

5.10.1.3 Technical knowledge is hard to find

Finding knowledgeable talent—both technical and business savvy—is hard to find in this industry. Being a hot area of focus, those with skills are quickly snapped up with big incentives.

An incubator with a talent and advisory pool in wireless telecommunications would be essential for a small startup to ramp up quickly. This is particularly true for startups focused on wireless technology, in which the makings of the technology can make or break the endeavor.

5.11 The economic model

This section discusses the economic model of incubators and covers the following areas:

- Co-investment funds
- How deals are funded
- How incubator funding seems to often determine the types of services offered to ventures (also dictates distribution of returns and how/if they're made)
- Minimum and maximum capital investments
- Equity stakes taken for the level of capital investment
- Incentive structure for the partners, employees of the incubator, and even employees of the ventures

The Equal Entry incubators interviewed charged a higher market rate for the office space, sometimes as much as 25% or more, and the extra fee was for the support infrastructure and advice from the operating director.

5.11.1 Development of Co-investment Funds

Incubators that invest capital into their startups were either initially set up with a co-investment fund or developed one after the fact. Most are in the process of developing a co-investment fund now. In all cases, these firms highly resemble venture capital firms, especially if the fund is a separate entity from the incubator. The size of the funds ranged from \$20 million to as much as \$150 million.

This study is not intended to determine which method—in-incubator or separate-from-incubator—is best for any one incubator. The answer to that question will often be tied to the incentive structure of the incubator for all entities that are involved, e.g. advisors, partners, employees, ventures, etc. Depending upon the future plans of the incubator (e.g. going public), considerations should be made for double taxation effects (being taxed once at the corporate level and again as a dividend) and other economic effects.

Those interviewed identified three different models of co-investment fund organization:

5.11.1.1 Fund as part of the incubator entity

In about half of the cases researched, the co-investment fund was part of the incubator's cash-on-hand and was earmarked for investment purposes. This type of a fund made it easier for the entire organization to directly share in the upside of the investments as well as position itself to be listed on the public markets as a corporation.

5.11.1.2 Legally separate entity, same management

In the other half of cases, with a few exceptions, the co-investment fund was a legally separate entity to the incubator, but the same incubator management team oversaw all the activities of both the fund and incubator.

5.11.1.3 Legally separate entity, separate management team = VC fund

Three of the firms interviewed had established funds operated completely independent of the incubators. In some cases, the funds had no obligation to stake any of the ventures within the incubator nor had a first right of refusal. These cases were really a name sharing and strategic partnership.

5.11.2 *Funding the Venture*

Many of the incubators started out as an organization bringing services into a cohesive mesh of value-added offerings for the venture. The incubator would then go out into its network and help the venture get its seed funding. A handful of incubators are sticking to this model but are also exploring the possibility of raising a co-investment fund, like many others that have already gone that route.

More than half of the incubators interviewed had either already raised a co-investment fund or were in the process of doing so. All firms that had these funds made it mandatory that they invest and take an equity stake in their ventures. They would not, except for

perhaps a very strong strategic reason, take on a venture that would use their facility solely as a facilities service or “instant office.”

The reasons for having a co-investment fund are several:

- Share in additional upside in the venture
- Signal to the entrepreneur (and thus ensuing round venture capitalists) that the incubator plans to share in the risk, giving comfort to the entrepreneurs and the venture capitalists
- Indicates to future round venture capitalists that the incubator believes in the venture and is willing to put its own capital at risk
- Allows the venture to move more quickly, especially at the essential seed stage, instead of having to expend valuable and often time consuming efforts to raise funds.

As a matter of public record, [Internet Capital Group](#) (Nasdaq: [ICGE](#)), uses their public currency to purchase pre-IPO equity in startups that match their vertical market maker⁴² strategy and horizontal market platforms. Models like that of [ICG](#) have positives and negatives. One of the many pros: it’s an advantage to have another form of currency, that being the public stock, to purchase what might be another big pop up in the stock market when the investment venture launches its IPO. A significant con is that a softening of the market could adversely (in multiples) affect the incubator’s public valuation, as is exemplified by the drop⁴³ in [ICG](#)’s public stock since it uses a multiple⁴⁴ to buy a multiple.

As a matter of note, incubators that engage in future round investments in their seed funded ventures typically will not lead, whether or not they have the financial means. This is in the best interest of the entrepreneur, who benefits from a higher valuation. If the incubator is interested in investing in future rounds, it will have a tendency (like all

⁴² Market makers are vertically aligned firms that match buyers with sellers—hence the term, “market makers.”

⁴³ From a market capitalization of over \$43 billion in early January 2000, to just over \$8 billion in early May 2000

investors) to keep the price low, while still balancing investment from initial rounds. These considerations are close to those faced by an early stage venture capitalist.

Consequently, the incubator's preference is to have the ensuing round venture capitalists lead and hopefully drive up the valuation, giving a means of satisfaction and validation that the incubator did its job in caring for the venture. Ensuing rounds should be priced more expensively than the seed, or other previous round, and it's to the advantage of the entrepreneur to drive that valuation up.

5.11.3 Incubator is a Startup Too

In most of all cases, the for-profit incubator itself is also a startup, being on average less than a year old. Most incubators are busy working out details of their own organization, refining incubation methodology, hiring, and tending to the normal build-out of any startup. In many cases, they are also registering and preparing for an IPO of the incubator entity. At the end of the day, the incubator needs to practice what it preaches and take care of the ventures it's funding. After all, what's the point of going to an incubator and giving up more equity in the first place?

5.11.4 Incubator's Own Sources of Funding

The type of incubator and its services is often dictated or related to the type of funding it receives. Here are the three major types of sources of funding for incubators and how each affects the services offered:

5.11.4.1 Real estate development and cooperatives

Real Estate Development Cooperatives are incubators that are part of a real estate property complex or park. They are often used to draw innovative companies or provide a different mix of clientele.

⁴⁴ Stock market valuations are sometimes referred to as "multiples," a technical banking term that is often used as a benchmark. The term comes from the fact that stock market valuations are often quoted as a multiple of some other benchmark, like earnings or projected profits.

One such example is the Prospect Hill technology incubator founded by Arthur Nelson, Chairman of Nelson Properties, considered an “early mover” along the Route 128 technology highway. The incubator was started in 1980 and offered all the amenities of today’s incubators, including a link to the research labs of Boston and Cambridge. The office space was offered at no cost, in the hope that the ventures would eventually move on to inhabit the office parks’ other office slots. This was a pioneering and experimental venture by Mr. Nelson. As is the case with many novel and experimental ventures, this one was before its time. Currently, Mr. Nelson is the founder of the [American Computer Society](#) (formerly the Boston Software Association). He has many venture philanthropic aspirations for the organization and may even return to the social aspects of the business.

5.11.4.2 Non-profit sources of funding

Incubators supported by non-profit funds often provide all the same services as their for-profit siblings, except usually with fewer staff. They don’t have any requirement to return funds back to the originating donator. Often these incubators have a for-profit or not-for-profit subsidiary that can facilitate the ownership and handling of equity gained in the incubator’s ventures.

5.11.4.3 For-profit sources of funding

Like any type of for-profit funding, the fund will often have fiduciary responsibilities that require some sort of return distribution, either in stock or cash. The trend is to make the distribution to the Limited Partners in the form of stock, such that the LPs can determine their best means of handling taxes and capital gains specific to their personal or corporate situation.

5.11.4.4 For-profit sources of funding that are private

Many investment trusts, family estates, and other types of private funds are investing in incubators. These types of funds may not impose the same distribution requirements, and

therefore investments may be made for the long run. These are called evergreen funds/investments. Their advantage is that the investments can be made for the long run without the need for any liquidation events, thereby not forcing an IPO or trade-sale.

5.11.4.5 For-profit sources of funding from the public markets

When an incubator's stock trades publicly, funds that can be invested are part of the "free cash flow" of the firm. Similar to private funds, these funds need not necessarily be dispersed to any investors since they only hold public stock in the incubator. The advantage is the same—investments can be made in the long run without the need for any liquidation events.

5.11.5 Minimum and Maximum Capital Investments

Incubators often have a minimum capital investment size. This necessary size is due to the floor at which the same amount of effort must be expended for a small investment as for a larger investment. This minimum can range anywhere from \$50,000 to \$500,000.

Maximums are typically true for seed rounds and only apply to those co-investment funds that are large enough to take the hit without too large a percentage devoted to the one investment. For a seed round, this is typically about \$2 million.

Incubators in the public markets should either have strong ventures in its stable or already have a large number of them in their portfolio. The rationale is that any significant event—whether spinout, liquidation, or other—in a small portfolio could drastically affect the balance sheets and thus the public stock price, sometimes favorably and sometimes not.

5.11.6 Equity Stakes

Of the incubators interviewed, there was no meaningful weight toward any one level of equity percentage range. Exact arrangements varied on a case-by-case basis, with only a handful that had a rule-of-thumb guideline with possible, though few, deviations.

Equity breakdowns were as follows:

- Firms who see themselves more as minority shareholders and take equity as any inside-director would. Usually these were firms that didn't invest any seed capital but rather consulting types of services and sometimes office space. The ventures would at some point leave the facility with limited focus of the incubator owners in future rounds of activity and investment. Often called Venture Accelerators.
- A range of 5% to 25% for those who throw in service offerings that could be provided from inside the incubator, often with office space included. Some of these were Venture Incubators and some were Venture Accelerators.
- A range of 25%-60% as the sweet-spot for investments. These were typically Venture Incubators.
- Professional services firms like accounting, investment banking, and management consulting firms either invest capital (equity stakes similar to those of a venture capitalist) and/or exchange services for a combination of cash and equity (often a minority stake from 2%-15%). Often called Venture Accelerators.

All of the firms that have plans to take the incubator public push for a majority shareholder percentage or greater mark so as not to fall under the Investment Company Act of 1940.⁴⁵

For most incubators, these equity percentages were made on a dilutable basis with pro-rata investments in ensuing rounds being optional case-by-case, with a small handful of incubators offering them on a non-dilutable basis. For any of these equity options, real estate, office services and supplies, and advisory services were often charged back on an at-cost basis. A handful of incubators included the real estate costs as part the equity charged to the venture.

5.12 Incentive structure

All the incubators interviewed noted that they exist to help the investments grow and create value for all those involved, and were thus not in the business of “flipping” ventures, but rather building to last. None of the firms, however, had installed incentive structures that would prevent bringing up a venture simply in order to flip it. Incubators invested in the long-term success of a venture can plan the company’s structure as a franchisable business as a measure against flipping. This strategy assumes that flipping new ventures would be bad for an incubator’s reputation.

See the “Risks and Pitfalls” section regarding grandstanding.

⁴⁵ Investment companies must ensure they don’t qualify as a public mutual fund as is defined by The Investment Company Act of 1940, which governs them with very strict covenants, such as disclosure of their investments and organizational details in public filings.

5.13 Geography

Much like venture capital, incubation is a very local business. Incubation is all about being close to the startup. The local network of contacts and access to the local talent pool as well as relationships with local and community governments are all essential and often points of differentiation.

5.13.1 Information and Capital Asymmetry

Geographic regions present opportunities for incubators when there is asymmetry of either information or access to capital in that region. Regions which lack the knowledge capital to teach would-be entrepreneurs the how-to's of creating a startup are regions in a need of assistance and are thus an opportunity for incubators.

Similarly, regions where there isn't ready access to venture capital and other sources of funds for startups also present a need for incubators (and venture capital, for that matter). The question remains whether such a region—which is not likely a major metropolitan areas, though may include even a few of those cities too—has enough going for it in the New Economy to foster the right types of relationships sustain them in that local market.

Arguably where unwalled incubators exist, such as the regions around and including Silicon Valley or a top-tier technical university like [MIT](#), needs are very different from those in environments that lack talent, ideas, and capital. But incubators may exist in these unwalled environments for several other reasons:

- To capture and retain talent and ideas that would otherwise migrate to other regions of opportunity
- To facilitate the entry of ventures from other regions that do not have the critical mass of resources and opportunity

5.13.2 International Considerations

The entrepreneurial spirit has built many of the successful businesses in the U.S. Internationally, this concept can be very foreign though the fever is catching at a tremendously rapid pace. The Internet is driving the lightning speed advancement and deployment of technology around the world. Additionally, the spreading global mindset to put capital to work on high-risk for higher-return investments is fueling this expansion.

Still, internationally, there are additional needs that are placed on an incubator, over and above those provided for in the U.S. domestic market. Challenges include cultural and language differences, different sources and mindsets of the international investors who may not be familiar with venture investing, sourcing the right high-technology skills and those with the right vision, developing economies or public markets in which to raise public capital or exit, managing political sensitivities of the technology's user, lack of economic data, competition from state-owned enterprises, and even the possibility of civil wars.

In going global, having a local presence in each target market is key. Because incubation is a local business, incubators are quickly developing local offices that are syndicated around the world. The question raised: can the incubation model scale?

Benefits of developing incubation offices in other countries include:

- Develop knowledge about the local culture, business environment, technology use, etc.
- Develop local contacts instrumental in bringing ventures to that market
- Assist with local sourcing of talent
- Develop a venture once and implement it several times over in each local market, while customizing for that market, resulting in "instant globalization"
- Ability to IPO and list on several public markets with increasing ease of access. An incubator can be crucial to facilitating the management of a

venture's listings in multiple markets and the challenge of concurrent reporting and regulatory overhead requirements.

- Export great ideas and teams to other local markets

5.14 Time within the incubator

The amount of time that a new venture can stay within an incubator will vary on a case-by-case basis but will range from 6 to 18 months for a high-technology software firm, as long as 5 years for a bio-tech firm, and as short as 3 months (purportedly) for an existing firm extending into other local and international markets. Firms that provide consulting types of services that give the startup a type of "rocket booster" claim a project timeline of 90-120 days that could shave off just as many days of actual startup development time.

Milestones to exit varied but centered around the following options, according to the firms interviewed in this study:

- First round of institutional funding
- Space constraints within the physical incubator
- Failure of the venture to meet agreed upon milestones
- Trade-sale/merger to/with another firm

6 CASE EXAMPLES

Case examples for a Venture Accelerator and Venture Incubators have been documented with anonymity. Due to the small sample of Venture Networks and Venture Portals, these cases are identified by company and have been documented with information obtained from publicly available sources. Contents of each example have been approved by the respective reference. These examples only serve as cases and are not in any way judgment calls.

6.1 Case Example 1—Venture Accelerator

Incubator type: Venture Accelerator

Founded in mid-1999, to create durable value in promising companies. Founders all have extensive entrepreneurial backgrounds. Their goal is to systematize what they've learned. This firm was originally a Venture Incubator but has shifted to a model that better serves their clients' needs. Partnerships with venture funds and strategic partners; some have invested in the firm and some have not. Their track record includes four companies, with two of them valued at over \$300+ million each (post-Series B).

Industry focus: Internet technology

Services provided: No capital provided, no management positions, no recruiting, no investor road-shows. Core services: strategy/tooling/roadmap, business financial modeling, communications, product development, technology assessment, venture consolidation. Takes on 20 projects a year, compressing a normal 8 months of work into a 12-week engagement cycle, or 4 projects in parallel with staging.

How deals are sourced: Clients are top-tier venture capital firms but ultimately engaged by the new venture. Often provide due diligence for the venture capital firms, in a way serving as an outsourced service for the venture capitalists.

Venture criteria: Looking for deals that fill gaps in the industry, tough to deliver, half-billion market potentials, and Fortune 500/1000 spinouts. Has internal research department to determine the next area of focus.

Point of intervention: Just after the first round (series A) of financing by a top-tier venture capital firm or strategic investor.

Economic model: Most fees in the form of equity in the new venture, with some cash intake. Percentage of equity is the same as an inside Director would earn, e.g. 1%—7% post-Series-A. Structured as a C-Corp providing consulting services, and is positioned to possibly go public.

Staff: Now about 40, with an expected 80 billable employees.

6.2 Case Example 2—Venture Incubator

Incubator type: Venture Incubator

Create durable value in promising companies. Founders all have extensive entrepreneurial backgrounds having founded some of the original Internet software and infrastructure firms. Currently in one location, looking to expand nationwide (4-5) and internationally (3-4). Partnerships with various strategic partners, including recruiters, accounting, and law firms. Extensive board of advisors that serve as mentors to new ventures. Has developed a 100-page venture development book for its incoming new ventures.

Industry focus: Core technology for Internet technology

Services provided: True service firm: development from concept to prototype, form communications strategy, help find seed funding, plan exit strategy, arrange facilities and infrastructure, technology architecture, business development, operations, law and accounting services, many in conjunction with global partner firms. Onsite web hosting, network infrastructure, DS-3 connection to the Internet. No capital provided. Takes on 10-20 projects year per location, in a 6-month cycle. 8-9 ventures in parallel.

How deals are sourced: Clients are top-tier venture capital firms but ultimately engaged by the new venture. Often provide due diligence for the venture capital firms, in a way, an outsourced service for the venture capitalists.

Venture criteria: Same criteria as a venture capital firm.

Point of intervention: Concept, seed, early stages.

Economic model: All fees are in the form of equity, typically 15%–20% (non-dilutable, but may be restructured), plus anything paid to partner professional services firms.

Structured as a C-Corp providing services, not an investment or operating firm, and is positioned to go public at the appropriate time.

Staff: 12 people and growing.

6.3 Case Example 3—Venture Incubator

Incubator type: Venture Incubator

Founded in late-1999. Founders all have extensive entrepreneurial backgrounds, especially in Internet marketing and software. Developing partnership with local university and a highly acclaimed community non-profit incubator. Additional internal research facility to create new ventures. Not located in Silicon Valley, Boston, or New York City.

Industry focus: Internet technology, online direct marketing, wireless, broadband, B2B. No online retail, no consulting, no non-Internet, no bio-tech.

Services provided: Full-breadth of services including seed funding, financial modeling, human resources, full staffing, world-class network operations center, computers, office infrastructure, off-shore programming/engineering, proving business model. Takes on 20 projects a year in a 6-month process, or 4 projects in parallel with staging.

How deals are sourced: Concept and seed. Local firms only (within state lines), one incubator location. Partnership with local university and their academic programs, including the funding of research. Internal scientist and visionaries, website submission, network of partners. Business plans reviewed by venture partners.

Venture criteria: Looking for deals that require a lot of idea development, high growth markets that are scalable, \$20 billion or above total market segments. Goal to IPO or be sold.

Point of intervention: Concept only.

Economic model: Structured as an SEC defined operating company, owning controlling shares (over 25%, typically 50%, largest shareholder, super voting rights on Board) in new ventures. Goal to co-invest in every succeeding round of investment, with the goal of

minimizing dilution. The fund is currently separate but will be integrated for preparation to take the incubator public.

Staff: Now 25 people, 32 expected, with 75+ off-shore resources (not on payroll).

6.4 Case Example 4—Venture Incubator

Incubator type: Venture Incubator

Founded in mid-1999 to make the Internet entrepreneurial journey more efficient and reduce execution risk. External venture ideas with a growing focus on internally generated ideas. Small board of advisors, no brainstorming resources (yet), entrepreneurs-in-residence program. Good ties to local universities but no formal ties. Not located in Silicon Valley, Boston, or New York City. Considering scaling the model to other U.S.-domestic locations. 25,000 square feet of space.

Industry focus: Internet technology: B2B, B2C.

Services provided: Full-breadth of services including strategy, seed capital, functional consulting, collaborative network, open-source turn-key technology, office infrastructure, human resources. Takes on 12 projects a year, or one per month. 9-12 months in facility, and move out after first venture round.

How deals are sourced: Concept and seed. One-page website submission, network of partners. Reviewed by team of three senior experts: strategy, financial, legal. Likely focus on Fortune 500/1000 company spinoffs.

Venture criteria: Not looking to commercialize new technology, but rather capitalize on existing technology to deliver business efficiencies. Grow into sustainable businesses, not necessarily IPO or sale, only if it makes sense.

Point of intervention: Concept only.

Economic model: Majority stakes in the company. Structured as a services company providing services. Could conceivably be positioned to go public. Considering raising a co-investment fund.

Staff: Now 45 people, with over half in technology.

6.5 Case Example 5—Venture Network

Incubator type: Venture Network ([Internet Capital Group](#): Nasdaq [ICGE](#))

[Internet Capital Group](#) is an Internet holding company primarily engaged in managing and operating a network of business-to-business (B2B) e-commerce companies. Their goal is to become the premier B2B e-commerce company by establishing an e-commerce presence in major segments of the economy. They believe that a sole focus on the B2B e-commerce industry allows them to capitalize rapidly on new opportunities and to attract and develop leading B2B e-commerce companies. As of April 30, 1999, they owned interests in 29 B2B e-commerce companies which they refer to as Partner Companies.

When Walter Buckley and Ken Fox formed [Internet Capital Group](#) in early 1996, the B2B e-commerce industry was in its infancy. Walter and Ken held two convictions that continue to drive ICG's vision today: first, they believed that there is demand for convenient and efficient on-line transactions that will fundamentally change the way people conduct business. Second, they felt Web-based business-to-business e-commerce presented the greatest opportunity for market growth and impact. This vision is becoming a reality.

Industry focus: Internet technology with a focus in B2B

Services provided: The operating strategy is to integrate Partner Companies into a collaborative network that leverages the collective knowledge and resources of [Internet Capital Group](#). Acting as a long-term partner, they use these collective resources to actively develop the business strategies, operations and management teams of Partner Companies. Resources include the experience, industry relationships and specific expertise of the management team, Partner Companies and Advisory Board. Currently, their Advisory Board consists of individuals with executive-level experience in general management, sales and marketing and information technology at such leading companies as Cisco Systems, Coca-Cola Company, Exodus Communications, IBM, MasterCard, Merrill Lynch and Microsoft. They believe that building successful B2B e-commerce

companies enhances the ability of their collaborative network to facilitate innovation and growth among Partner Companies.

How deals are sourced: Deals come in via network sources and are reviewed by a team of highly qualified former venture executives.

Venture criteria: B2B exchanges with the potential to achieve the dominant market share in each industry. “Incubator strategy helps portfolio companies competitively in a winner-take-most market ...”⁴⁶

Point of intervention: Typically later stage, pre-IPO. Has formed a subsidiary called [eColony](#) that does seed-stage incubation.

Economic model: Structured as an Internet holding company. Has raised over \$1 billion in cash from the public capital markets.

Staff: About 30 and growing.

⁴⁶ Robertson Stephens BankBoston, Research Report, “Internet Capital Group (ICGE)”, March 14, 2000.

6.6 Case Example 6—Venture Portal

Incubator type: Venture Portal (TheElevator.com⁴⁷)

Founded in mid-1999, The Elevator.com is home of the “Elevator Pitch”—the place where entrepreneurs and investors meet online. Their business is matching fledgling entrepreneurs and investors in all kinds of new ventures. The Elevator takes its name from the elevator pitch—that moment when an entrepreneur traps an investor on the elevator and delivers his or her sixty-second pitch on why they should invest. Just entered into a partnership with IBM, which will co-develop local versions of the portal.

Industry focus: All

Services provided: No capital provided, no management positions, no recruiting, no investor road-shows. Just an Internet portal.

For entrepreneurs, The Elevator experience means posting an Elevator Pitch (150 words) on a secure page where it can be viewed by potential investors. Once a pitch passes muster, an entrepreneur gets to post a complete business plan. All this information is held in complete confidence and secured through a password-protected page where only pre-screened investors can access the plan. Once an entrepreneur has finished posting, s/he is admitted to The Lounge (“Level 5 to the left”) where one can check from time to time to see how many investors have viewed the pitch or plan.

For investors, joining The Elevator means paying a \$150 registration fee. This gives one year of unlimited access to an array of Elevator Pitches and business plans. The Elevator sorts them by location, amount of financing sought, and experience of the entrepreneur. Their goal is to get the right investor and entrepreneur into an on-line discussion about funding.

⁴⁷ Obtained directly from the company’s website with additional input from the founder.

How deals are sourced: Word-of-mouth, and now with offline events sponsored by IBM. Three or four new Elevator Pitches per day, with a total stable of 500 so far. More than 35 potential investors signed up.

Venture criteria: Equal access by all—everything from bowling alleys to restaurants to Internet businesses.

Point of intervention: All stages of development. Will assist entrepreneurs to perfect their elevator pitch for \$79.95.

Economic model: Fees charged to entrepreneurs to perfect their elevator pitch, and annual dues to potential investors.

Staff: 2 people.

6.7 Case Example 7—Venture Portal

Incubator type: Venture Portal (NVST.com⁴⁸)

Founded in 1995, NVST.com launched its site in April 1996. Its founders are Lori King, one of the Northwest's top merger and acquisitions professionals, and Samantha Wilkinson, who was nicknamed "Dr. Net" by her colleagues while consulting at Microsoft.

NVST.com is an Internet hub (or portal) for the private equity and finance community. The NVST.com website provides online access to venture capital or merger and acquisition investment opportunities, professional journals, research databases and educational resources for professional training. NVST.com is the only company providing this broad range of private equity investment resources. At this site entrepreneurs and professionals in the private equity industry can find new deals, meet one another, access online business tools and learn more about their marketplace.

Industry focus: All

Services provided: Private Equity Directory—Database of more than 60,000 investors and advisors. List yourself, or search for an advisor for free; full access to database requires membership. Opportunity Listings—More than 6,000 business opportunities totaling \$121 billion and \$164 billion in available capital. Journal and Database Publications—NVST.com is the exclusive online publisher of several prestigious finance journals and completed transaction databases. Private Placement Library—Available to accredited advisors only through secure access, NVST.com provides electronic publishing of private placement memoranda. Business plan services. Web design services. Online Academy—Continuing education courses for professionals in the private equity industry.

How deals are sourced: Word-of-mouth and online links.

⁴⁸ Obtained directly from the company's website with additional input from the founder.

Venture criteria: None. Equal access by all.

Point of intervention: All stages of development.

Economic model: Annual fees charged to entrepreneurs and investors.

Staff: 35 people.

7 THE VALUE PROPOSITION

The value proposition that an incubator hopes to create can be broken down into the following areas of analysis: (1) capital, (2) ideation, and (3) development. The analysis is muddled by the fact that capital has become a commodity in today's market, and thus providing just capital isn't enough.

7.1 Capital

Incubators sometimes fund early stage deals from external sources that were either missed or not funded for any number of reasons by a top-tier venture capitalist. In a way, this lowers the bar on who enters the world of roller coaster rides and pitfalls, high valuations, high risers, and quick sinkers (or is it just a 'floater'?). More deals are being funded and, given the chance, one of them could become the next winner. An incubator's ready access to capital, if offered as a service to ventures, can greatly ease and speed startup activities. By itself, capital isn't enough value, but it is a point on the line of creating value.

7.2 Ideation

The incubator could either be developing its own novel ideas and backing them up with resources or helping a venture mold and formulate its business ideas into something more worthwhile to the market. In both cases, it's about getting the right resources together to help the idea creation, formulation, planning, and execution.

Below is a diagram that I've created to depict where to seek input from the various forms of incubators.

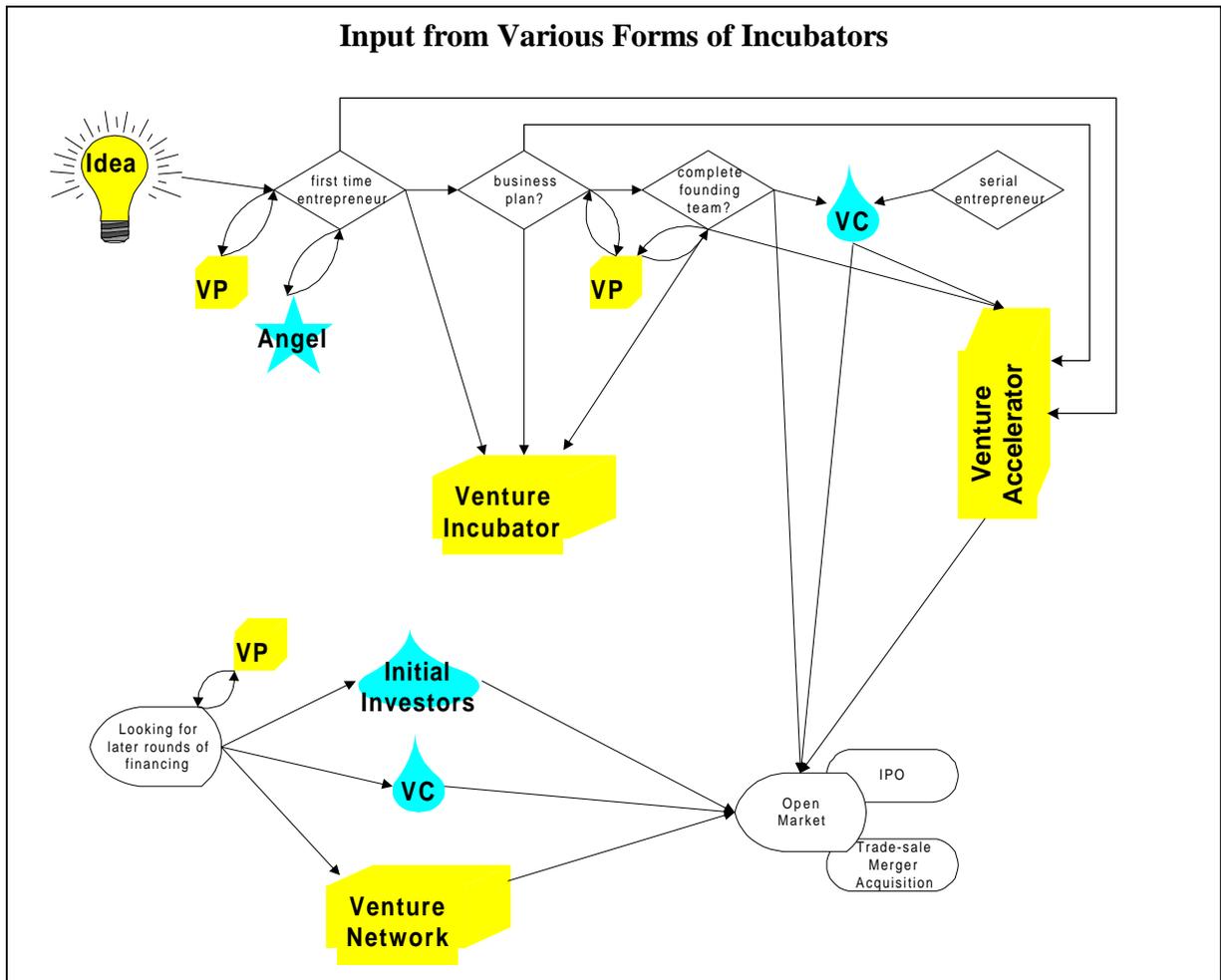


Figure 7-1: Input from Various Forms of Incubators

7.3 Development

Building a company isn't so much about the capital or the idea, as much as it is about perfecting the entrepreneur and the organization. The incubators hope to fortify and educate these teams of entrepreneurs to create the next wild one.

On a more holistic note, the incubator hopes to affect the entire venture on both a macroscopic and microscopic level:

7.3.1 Macroscopic: the Venture's Focus, Product, and Market

On a macroscopic level, the incubator should be assisting the venture in focusing its service, product, operations, marketing, planning, and other aspects of the business. These are benefits that the venture should be getting from the incubator's network of contacts, either through introductions to other advisors and players in their industry for advice or strategic validation or by imparting the founders' and managers' own wisdom and relevant experience. The goal in either case is to make the process easier and ensure it stays on-track, the first time around.

7.3.2 Microscopic: The Founders' Activities and Effects

On a more microscopic level, the incubator should be developing programs for the entrepreneur to fortify the entrepreneur's own knowledge base and skills. For instance, a handful of the incubators interviewed were providing their entrepreneurs with business programs like accounting, finance, and marketing seminars. Their course roster resembled a crash course MBA program.

8 SUSTAINABILITY

Are incubators sustainable? The simple answer is “yes”—provided the incubator is filling a real need and the real need lasts.

In a booming bull market with rising successes in the public eyes, incubators and their startups have opportunities and will continue to grow, especially with ready access to cheap capital. Perhaps over time, startups that feel they didn’t get what they had bargained for, or perhaps got more than they expected, will separate the wheat from the chaff. Additionally, a sustained softening of the public markets will more readily separate the incubators that provide real value from those that don’t as much or at all.

Regardless to how the public market is operating, good ideas and technology are still valuable, but questions remain regarding the proper timing for implementing a startup.

8.1 Three sustainable values

Taking into account my numerous interviews with incubators, venture capitalist, analysts, visionaries, and others in the industry, as well as the views publicized through current business journals and articles, I have distinguished three attributes that an incubator can sustain in the long-term:

- Brand equity (name)
- Network affiliations (Rolodex)
- Operational experience (hands-on)

8.1.1 *Brand Equity (Name)*

As in the world of venture capital, having been funded by one of the top-tier venture firms gives a venture a level of vetted credibility that says it has passed the well-known and strict investment criteria of that firm. I have found this to be similarly true in the world of incubation. Ventures that come out of the handful of incubators that have a track

record have a gained perceived value from that firm which in turn drive many of the other derived aspects of the venture, most importantly valuation.

As long as existing incubators can continue to pick the winners, their brand-name value proposition can be sustained. New incubators will need to pick successful ventures and prove to the market that their inherent methodology works, a difficult proposition if their recent entry positions them to miss the “cream” of the ventures, which will go to top-tier venture capitalists or incubators with a track record. A new incubator will need to overcome this Catch-22 in order to build brand-name value, perhaps using a strategy similar to the successful contrarian stock-picker.⁴⁹

8.1.2 Network Affiliations (Rolodex)

An incubator will attract and keep the best ventures provided it has the right strategic network of advisors, potential clients, industry experts, and others who can validate, position, service, and bring to market the new venture. The faster a venture can validate or re-position its business model, attain its first strategic client, or create strategic partnerships, the faster it can achieve revenue recognition and thus its broader financial and strategic business goals. The successful incubator or venture firm may not have all of these resources in-house but should be able to dig into its Rolodex network, and, with a few phone calls, make the right introductions.

When an incubator has a strong vertical or industry slant, it will often have strategic contacts within that space, including potential clients, marketers, strategic consultants, etc. Thus, incubators with focus should be able to provide more value than those without such focus.

⁴⁹ A stock picker that often bets against the mass movements or consensus in the market, in the hopes that the market does not see the hidden value in that particular stock or other particular market gyration.

8.1.3 Operational Experience (Hands-on)

Often a critical complaint for venture firms, especially large ones that cannot dedicate partner time to a venture, is the need for true hands-on time with the venture. As an in-house resource offered by the incubator to its ventures, “real-world” operational and domain experience is immensely valuable, especially for the first-time entrepreneur or entrepreneur in a new industry space. The key is getting the right “gray hairs” who have gone through the process many times over—and have undoubtedly made the mistakes—and can impart that learning to the incubator’s ventures.

These three assets —brand equity, network affiliations, and operational experience—can make or break many deals, depending upon how good they are. All other services lines of an incubator can be outsourced to a worthy providing partner.

8.2 Office space: sustainable exception in some areas

Depending upon regional specifics, there may be other sustainable exceptions to the three described above. One such example is the highly valued space proposition of Silicon Valley, where there is no available office space for rent at *any* price. In places like Silicon Valley, where proximity to the region’s unwalled resources is paramount to a budding venture’s success, office space and infrastructure is a highly valued commodity. Other examples are the areas around MIT, Harvard, and other Boston/Cambridge schools, or Silicon Alley in New York City.

9 SCALABILITY

Are incubators scalable? Being a fairly new industry of service providers and financiers, there are no real proven successes of scalability across multiple locations.

Being new, none of the for-profits or non-profits that I interviewed has proven that their model scales. In fact, most are just now beginning to expand into other locations. Several incubators already have multiple locations domestically with some international offices, but these are recent and have no proven successes yet.

Again, if we take the venture capital model that many incubators resemble, we are reminded that this model doesn't scale, particularly when considering the three factors that are sustainable. Two of the three factors of sustainability (a pervasive network and expertise of the founders) are assets difficult to scale, though the third (name brand) is easily scalable. But what's a name brand without services?

Incubators that are good at these three sustainability factors will have a difficult time scaling the model. Other incubator services such as office space, legal assistance, recruiting, etc. have been proven to scale to multiple locations, by the fact that many of these services firms have locations in many of those same markets. The key is developing methodology using proven successes by talent that can implement it.

In many ways, opening a new incubator location is very similar to opening a consulting office. One would argue that consulting firms are non-scalable for the exact same reasons. The difference is that consulting firms can send junior consultants around the world as needed, and projects survive without much hindrance. Startups, on the other hand, face the hurdle of the "get-big-fast" mode. Time is of the utmost importance, and the greater variability in solutions across startups only magnifies this issue.

Similar to venture capital firms, there are three basic ways to open other offices:

- Acquire a local brand name
- Partner at the local level
- Grow Greenfield

9.1 Acquire a local brand name

Acquiring an existing incubator can sometimes be the most effective way into a market, especially when looking for a network of local contacts and expertise. The driver would be to acquire a strong brand name in the market or an organization that is well developed. There have been no examples of this strategy from those I interviewed for the study.

9.2 Partner at the local level

A growing number of venture capital firms have selected this the method of developing a partnership to expand into other markets. This method works only for firms that have a brand name whose association would be attractive to the local firm, and vice versa. These relationships are typically structured as affiliates with no capital investments, licensing of the name, or with shared capital interest in the fund or a new joint fund as a limited or general partner. Often there is co-branding with the local brand and the national brand.

9.3 Grow Greenfield

Opening a new office is the most difficult proposition, especially if it's in a new market for the incubator. Most incubators are taking this route to expansion, mostly due to the fact that the local market is sufficiently large or there are no existing players in that market.

10 TAKING THE INCUBATOR PUBLIC—OR NOT

With skyrocketing incubator IPOs, other looming IPOs, and a softening of the public markets towards technology stocks, many incubators are expanding into other coverage areas and taking on more than one model to capture both market share and mind share. These moves help incubators diversify, capture more of the relevant market space, attract the widest range of public stock buyers, or a combination all these benefits.

In an interview with [Warren Buffet](#)⁵⁰ at [MIT Sloan](#), I asked about the New Economy incubators going to the public markets. Even though each of his responses to student questions reverberated around sticking to fundamentals, he did say that if he knew he had only a little while longer to live, he too would go to the public markets. This comment indicates his views on the public markets as being a short-term fixation rather than long-term fundamentals.

An incubator taken to the public markets, as with an incubated company or any company, is a marketing event that helps the firm as well as those within the firm. It helps in attracting talent to the incubator, gaining attention for the incubated firms, raising funding for all, retaining talent, as well as encouraging new entrepreneurs with potentially successful ideas. In many of the rural and international markets where there may be a dearth of capital or lack of entrepreneurial experience, a brand name that is reinforced by the PR of the public market can often be a huge advantage for the incubator.

Model public companies like [Internet Capital Group](#) and [CMGI](#) seem to work in today's public markets, but we'll likely see more diverse models appear on the landscape. Are these short-term plays, or can they survive the long-term scrutiny of the markets?

As with any public listing, there are two major forms of listings that have occurred for those incubators already in the public markets. Of those interviewed, only one—[Internet Capital Group](#) (a Venture Network firm)—went to market with an IPO. A number of

other early stage incubators were in current registration for an IPO. Only one of the incubators interviewed, [Net Value Holdings](#) (again a Venture Network firm) has done a backdoor listing.⁵¹

10.1 Joe Investor

Today's public market message is that new ventures are "hot, hot, hot." So the question is, how do I invest my money into a new venture?

Well, there are several ways. First, you could give it to a venture capitalist, but they will only take money from you if you pass their muster with the right name brand, connections, etc. For the average Joe, this isn't an option. As it is, venture capitalists' coffers are overflowing with money that already passes their tests. They're having enough trouble finding good investments for that capital that will still reap the same level of returns they've had in the past. Even though past performance is no indication of future performance (as you can see in mutual fund statistics), there is a better likelihood that the returns will be good, especially for the best of the brand name venture funds, like [Kleiner Perkins Caufield & Bayers](#) or [Sequoia Capital](#).

Second, you could invest your money directly into a new venture as an angel investor. Surely you'll find a venture that will take your money, smart or not. Do you know how to differentiate a good business plan from one that isn't? How do you evaluate the team and help them? But what if you invested in the wrong venture? There's no portfolio advantage as in a diverse stock fund; you could lose the entire investment. There are a few variations on this model that try to collectively combine and parse out angel money, such as [AngelTips](#), but there are still risks. This is not a good option unless you have millions of dollars to play with and don't care about returns.

⁵⁰ Warren Buffett was at MIT Sloan on May 4, 2000 for a Q&A session for Sloan MBA students, held in Wong Auditorium.

⁵¹ A type of public listing that uses an existing publicly listed company shell, and backing the firm into it, forgoing much of the publicity of an IPO as well as the enormous costs associated with underwriting an IPO, while allowing the firm to tap into the public market.

The next option would be to invest the money into the new publicly accessible venture capital fund that is currently affiliates with [Draper Fisher Jurvetson](#), considered one of the top-tier venture capital firms, called [meVC](#). Dependent on incentive structures of the venture capitalists, what's to say that they don't funnel the relatively less risky and/or potentially higher return investments to their main venture capital funds that give them a greater piece of the shared upside returns? Or, looking at the other extreme, what if the venture capitalist funneled all of their winners (or even just some of them) into the [meVC](#) fund, wouldn't you as a preferred investor in their main funds be a little miffed that they didn't use your supposedly "preferred" money? Would you return as an investor? Remember, funds that come from the public traded for common stock are last to be paid (if at all) in the case of liquidation.

Another option is publicly traded incubator funds. Not much different from the publicly traded venture fund described above, except that the firm is much more focused on investing the capital raised from the public markets into their ventures without competing sources of capital within the same firm, a positive aspect. To top the risk, many incubators have lots of business experience and can be much more times a risky investment. A few of today's incubators were troubled companies seeking a second chance and have remade themselves into an incubator, and they themselves might not be the best mentor for a new venture.

The lesson is that not all capital is created equal—or maybe it was created equal, but its present ownership has shifted its weight. The visionaries in this space and a few of the analysts I spoke with said that if they could invest in a top-tier or even second-tier venture capital fund, they would rather do that than buy into a public incubator stock. But not all of us Joes have that option, and so the public incubator stock remains an alternative to consider.

10.2 Advantages of going public

For the incubator, what are the advantages of going public? Many of the reasons for taking an incubated company public are also good reasons to take incubators to the public markets. Incubators are the buzzword of the New Economy, and you know what that means, regardless of actual value.

10.3 Disadvantages of going public

Incubators have many of the same disadvantages of any company going public, without exception. These disadvantages are the public scrutiny of investments and methodology, open access by competitors, and a need to expend significant resources to maintain the standards of the market as well appease them to remain in favor.

Additional disadvantages that are specific to incubators:

- The need to adhere to the Investment Company Fund Act of 1940. This may preclude a large number of deals and/or require creative and legal accounting methods.
- Depending upon the makeup of the portfolio, any significant events for any of the ventures within it could adversely affect the incubator's stock or even those of other ventures within the incubator. A significant event could be defined as a liquidation, spinoff, merger, lower or higher expected profits/losses, etc.

11 RISKS AND PITFALLS

Incubators, by their very definition, reduce the threat or consequence of failure for ventures, but there are a number of potential risks that they themselves face.

11.1 Darwinian Theory of Entrepreneurs

This theory, as I've dubbed it, says:

The best entrepreneurs with the greatest ideas tend to float to the top-tier venture capital firms. So where do the rest go? Well, they float down the pecking order to the second tier venture capital firms, and so on down the line, and arguably to the incubators, unless there is no other not-easily replicable reason they should go to an incubator over a venture capitalist.

If an entrepreneur could get funded by a top-tier venture capital firm, tap into its network, gain the brand name, and obtain advice from one of its experienced partners, shouldn't the entrepreneur do it? Most that I interviewed agreed wholeheartedly. An exception might be if a vertically focused incubator was tuned into a certain area that required an installed technology lab or strategic contacts that no venture firm could provide. Example areas could be bio-tech or even wireless-telecommunications.

So what happens to the rest? Well, they just trickle down the pecking order to the second tier firms and incubators.

The exceptions to this theory are in the following cases:

- There are more deals than the top-tier venture firms can handle.
- Incubators may be able to get closer to the formation of some of the good deals and thus bring them in as they come out of the gate.

- Top-tier firms often miss great deals. One notable top-tier has an “anti-fund” that’s composed of great ventures that were funded by some other firm, that the top-tier had passed on.

Additionally, an incubator doesn’t want to attract entrepreneurs who are deficient at their task or is risk averse.

For this reason, incubators are good markets for first-time entrepreneurs with a great idea that may not have access to a top-tier venture capital firm. In a few years, incubators may become these types of top-tier firms, once they’ve established a track record for themselves.

11.2 Poaching talent and ideas

There are potential risks to the poaching of talent and ideas from either the incubator staff and/or other ventures within the incubator. A handful of incubators have clauses in the terms sheets that defend against this, but sometimes it’s hard to enforce noting that the incubator should be installing the best possible team for their venture.

11.3 Risks in the public markets

An incubator in the public markets should either have strong ventures in its stable or already have a large number of them in their portfolio. Any significant event—whether spinout, liquidation, or other—in a small portfolio could drastically affect the balance sheets and thus affect the public stock price, sometimes favorable and sometimes not.

11.4 Busy going public

Incubators that are too busy with the enormous details of listing themselves on the public market may detract from the activities of the ventures they’re supposed to be incubating. Incubators need to ensure that they practice what they preach.

11.5 Building to “flip” or to “last”

In many aspects, incubators without a track record are very similar to first-fund venture capital firms (new venture capital firms that are investing their first venture fund), and even incubators that don't have a co-investment fund. This incubator is under a microscope to prove that their model or methodology works, by some definition of success, which will vary, just like a new venture capital firm that needs to prove its investment strategy works before it can raise a second fund.⁵²

Depending on who the incubator serves, the incubator and the entrepreneur must align their incentives and decide to either build the firm to “last” or to “flip.” The urge to flip to prove the incubation model may be great for short-term needs of raising capital. Flipping a company is obviously not a model that should be ethically approved but is rarely followed up on when evaluating a venture capital firm, and may extend out to these new incubators.

11.6 Adverse development of the organization

11.6.1 *Reduced failure, reduced entrepreneur?*

By the very nature of supposedly reducing the failure of ventures, the incubator may create an environment that may cause the entrepreneur to be less aggressive on going the extra mile or out on a limb. The reverse is that the environment also allows an entrepreneur to do exactly that: go out on a limb in a way s/he may not normally have done so, and thus possibly gain better results.

⁵² Pual Gompers and Josh Lerner note in their book, *The Venture Capital Cycle*, that there is a relation between reputation and capital raising. Venture capital firms in their first fund, which have shown no returns, find it difficult to raise new money. These firms have strong incentives to grandstand, which means they bring their investments to market faster and perhaps prematurely. First fund venture capital firms on average take their investments public in 2.7 years and non-first-fund venture capital firms in 4.0 years.

11.6.2 Reduced financial acumen

An incubator that acts as an investor and handles the financials may install a capital structure and other structures that may not have been created appropriately in the first place. Did the entrepreneur learn about this capital structure or just have it put to him/her? When the venture graduates, what happens to the capital structure, and what if it needs to change? Can the entrepreneur deal with that effectively, especially since the entrepreneur wasn't the one that installed it in the first place? What about the entrepreneur's next venture?

11.6.3 Attracting the right talent

Can the incubator build the right type of organization? Without the right type of team in place to carry the venture, there is no venture. The organization that is being built may not be the best organization. Can this venture attract that VP of Engineering that will either make or break the company?

11.7 Competency trap⁵³

When a set methodology has been installed into an organization, such as an incubator, oftentimes that methodology might work for today's New Economy, and it may not last. This means that as you become competent in an area, you may take for granted the assumptions underlying the original representations of that expertise: perspective, context, and timing. The incubator must continually update its methodology beyond the commodity business of creating businesses since it's obvious that today's world is rapidly changing and requires many modes of quickly changing operations.

11.8 One venture affecting another

What happens if the incubator has a bad venture? Does it affect its other ventures? It might, depending on how the public perceives the incubator before and after the event.

11.9 Intermediaries

Incubators may be seen as an unnecessary intermediary, especially in a softening market. If this happens, will venture capitalists and other potential future round investors look at a deal?

11.10 Backward integration by venture capital firms

Even though there exist venture capital firms that already say they “incubate” and always have, there are others that are considering taking on either more space or more staff to handle areas such as recruiting and other back office details. Some of this backward integration is being driven by the need to source talent fast, especially in the tight U.S. and international labor markets. Some of this movement could be a reaction to the incubators, though this latter point is very lightly supported.

11.11 Globalization of venture funds

The current pace of globalization of venture funds might be seen as both a threat and a helping hand. In many international markets, a venture fund offers a good brand name over a local incubator, where entrepreneurs might otherwise just go for the money. On the other hand, the huge international funds could also fund the same investments within the incubator, if not also the incubator itself.

⁵³ Adapted from a class session at MIT Sloan School of Management course 15.561, taught by Prof. Wanda Orlikowski, May 4, 2000.

12 VENTURE CAPITALISTS' VIEWS

In this study, I interviewed more than 25 venture capitalists, many from highly respected top-tier venture capital firms. Most of those interviewed were a founding partner or other general partner within the firm. The responses can be categorized into the following:

12.1 Won't work with incubators or their ventures

A few of the venture capitalists stated that they had a policy of not working with incubators or any of their ventures. The following were some of their comments:

- Incubators are an intermediary and provide no value.
- Incubators have adverse selection amongst their entrepreneurs. They viewed those entrepreneurs that used an incubator as those who were somehow deficient. Their thoughts are that smart entrepreneurs wouldn't give up additional equity for what the venture capitalists perceived as trivial or what a venture capitalist would offer anyway.
- The smart entrepreneurs would find a way to the "real money," that being venture capital. Those that couldn't weren't people they'd want to work with anyway. They noted that anyone from a top-tier school who has leadership potential should have sufficient access to venture capitalists. So if they didn't go to one in the first place, then there's something wrong there.

12.2 Will work with and fund incubator

A small handful of venture capitalists said that they have either invested in one or more incubators and/or their co-investment funds and are considering investment in other incubators. A few incubator venture capital firms have a strategic relationship with no capital investment in the incubator, just that the incubator will show its investments to the venture capital firm.

If they've funded the incubator, then they think it's a good investment, like any investment they would make, and expect a sufficient return. They also see it as another source of deal flow for the venture capital firm. In no instance will the venture capital firm not do their usual level of due diligence, and would handle it in any normal way with the usual scrutiny of any reference coming through any of their network of contacts and investments.

12.3 We are an incubator

A number of seed level venture capital firms note that they are incubators, and have always been, but never called themselves as such. They can provide any of the sustainable services of (1) name brand, (2) network, and (3) operational expertise with ease. The other services, such as real estate, human resources, etc., are nominal in their eyes and can be outsourced through their network of contacts with immediacy, as if they were on-hand resources. A few of the venture capital firms are backward integrating and obtaining in-house staff for recruiting and other higher-end services that are becoming increasingly difficult to source in today's tight labor and services market, especially in high activity areas of Silicon Valley, Boston, and New York City.

12.4 Skeptical, yet determining a position

Most venture capital firms don't yet know what they will do in relation to incubators but do see them as another potential source of deal flow. They're still awaiting a verdict.

13 CONCLUSIONS

Being a new industry, there aren't many proven models of incubator success. Indeed, success itself is variably defined. Because the majority of incubators do not have track records, it is currently impossible to judge which model objectively works and which doesn't. What is clear, however, is that certain models work better for certain circumstances. Not all models will work in all situations. In other words, not all incubators are created equal.

From my research and interviews with more than 70 incubators, more than 20 venture capitalists, and a handful of other visionaries, analysts, and commentators in this New Economy space, I can suggest answers to the following questions:

13.1 Is there a need for incubators?

Is there a need for incubators? Yes, there seems to be a need for incubators. They play many roles, including the following "ideals," though many incubators will provide a subset of these services or are still in the process of building out their own organization to provide these services:

- Capture potentially successful deals missed by venture capitalists
- Facilitate idea creation (ideation)
- Enhance product and services
- Accelerate speed of implementation
- Provide supplemental management
- Offer more "hand holding" than a typical venture capitalist
- Give access to expertise in marketing, operations, human resources, technical, management, strategy, business development, financial, and others
- Facilitate business development and partnerships
- Help in finding clients
- Facilitate sources of funding, now and later stage

- Portfolioize seed-stage ventures
- Provide additional deal-flow and vetting of deals for later-stage investors

Asked to take a stance on Venture Networks and their value to new venture creation, John Hagel of McKinsey and author of *Net Worth* noted that he'd like to wait and see.

13.1.1 Walled and Unwalled Incubation

In communities that are home to incubators without walls (e.g. MIT), incubators must try to move into the earliest possible position in funding a startup. Otherwise my Darwinian Theory of Entrepreneurs states that these entrepreneurs will go directly to the venture capitalists that swim around the edges of these incubators without walls. There will certainly be statistical deviation, but in these environments, that deviation will be low.

In environments where there's asymmetric access to capital and a network of professionals, there is opportunity for walled incubators. Such examples are the rural parts of the U.S. and, with globalization, (some would say even more importantly) the international markets.

13.2 How does an incubator ensure it gets good deal flow?

How does an incubator ensure it gets good deals over those that get rejected out of hand by the venture capitalists? The Darwinian Theory of Entrepreneurs and adverse selection plays into this question but may be overcome by the following actions:

- Develop internal ideation with the right "crystal ball"
- Get in early, before ventures get to the venture capitalists
- Provide full-service and deep domain expertise that has significant market share and mind share, over and above what a venture capitalist or other strategic investor can provide alone
- Create lower equity requirements

- Develop greater brand equity and mind share
- Build proven track record that gives vetted value
- Demonstrate long-term commitment to entrepreneur's success

13.3 Why would an entrepreneur go to an incubator?

With many sources of funding and avenues of assistance in today's global economy, why would an entrepreneur go to an incubator, as opposed to a venture capitalist or other strategic investor? Here are several reasons that emerged from this research. Incubators offer:

- Assistance in brainstorming a concept or application for a new technology
- Provide additional validation
- Assist in creating the business model and plan
- Facilitate seed funding
- Offer more "hands" to the new entrepreneur
- Provide an option for ventures that are too early or were missed by venture capitalists
- Provide unique access to services in a resource-deficient region (e.g. shortage of office space in Silicon Valley)
- Financial advantage in that cost savings in a contracted time frame are more than the cost of equity that must be given to the incubator
- Offer access to uniquely positioned/qualified domain experts or advisors
- Greater economies of scale and leverage for outside services (e.g. technical products and support, recruiting, etc.)

Incubators need to guard against the Darwinian Theory of Entrepreneurs. Most likely their target market is first-time entrepreneurs who have the potential to be top-tier leaders with great ideas. Incubators need to be aggressive in the local markets to avoid self-selection and attract the best talent and the best ideas.

Incubators that have either initially focused on internally incubating ideas or are now focused on doing so will have to deal with the self-selection of entrepreneurs. Only those who are willing to pitch their ideas without concern about the incubator “borrowing” the idea and morphing it internally will share their ideas.

The converse of this is applicable for incubators who have the three characteristics of incubator sustainability. In joining an incubator, an entrepreneur with a great idea that is not initially defensible could theoretically develop a type of barrier-to-entry, by sheer force of joining the incubator’s network of relevant partnerships. Other ventures that are defensible become even more powerfully defensible by becoming part of such a network.

13.4 How does an incubator accelerate a venture?

Among many factors, an incubator can attempt to accelerate a venture by:

- Fortifying every aspect of the venture and business plan to form a better strategy
- Getting clients faster (and thus revenue recognition)
- Adding a broader, more “seeing” vision
- Depth of experience translates into faster and better execution of the business plan
- Helping ventures avoid the pitfalls that would normally delay development.

13.5 What are scalable constraints to a sustainable incubator?

Incubators that are sustainable have the three assets of (1) recognized name brand in their industry, (2) a large and meaningful Rolodex of contacts, and (3) operational expertise. Incubators with these three assets are hard to scale, especially those that are vertically focused. Incubators have not yet proven to be scalable, but if we take the consulting company approach to opening offices, then with a mature practice and methodology, expansion into other local offices is theoretically possible. This, however, remains to be proven applicable in the very different and quick-paced New Economy venture world,

where even today's traditionally successful consulting firms are going through their own gyrations of reorganization. As [George Gilder](#),⁵⁴ self-admittedly proclaiming he doesn't know very much about incubators at the time, stated, he could not envision that office space and other infrastructure alone would create any sustainable advantage for an incubator. Two points that are clear from my research:

- Brand and network contacts are scalable to the extent that there is local mind share and contacts in those markets.
- Founders' time and expertise are not scalable.

13.6 Are incubated companies somehow inferior to companies that have gained their success through a “trial by fire”?

Does the assistance that an incubated venture receives create companies that are somehow inferior to companies that came into existence through the “trial by fire” method of company creation? The answer to this question could be justifiably affirmative, but incubated companies do not have a sufficient track record to make meaningful assessments. The real answer remains to be seen.

13.7 Are incubators good investments?

Incubation is a high-risk business because it aggregates a portfolio of startups in the riskiest stage of their development. Thus there are numerous pitfalls—as well as great potentials for high returns. Compared to a top-tier venture fund, the general answer will be likely be that incubators are not as favorable an investment. This being said, incubators that provide the right resources, have the right vision, and a perfected methodology for picking the right ventures could be outstanding investments. As noted earlier, [Warren Buffett](#)⁵⁵ himself commented that if he was not looking out for the long-term and only focused on the short-term, he too would IPO.

⁵⁴ Comments from a discussion at the dinner with George Gilder during the HBS Cyberposium Directors' Dinner at the DoubleTree on February 25, 2000, as well as a personal interview later that evening.

⁵⁵ Warren Buffett was at MIT Sloan on May 4, 2000 for a Q&A session for Sloan MBA students, held in Wong Auditorium.

Factors to consider:

- Being earlier stage → higher risk investments → potentially higher returns
- Potentially more failures due to a greater number of higher risk investments
- Darwinian Theory of Entrepreneurs and adverse selection say these are combinations of initially good and not-so-good deals (versus great deals from the outset)
- Vertical specialization can create more sustainable value but may also create more risk by having a less diversified portfolio of potentially overlapping or cannibalizing investments
- The business is people-resource intensive

13.8 Are incubators a good investment in a softening market?

Incubators may become more important when the markets soften since first-time entrepreneurs may find it increasingly difficult to get to venture capitalists who are funding only entrepreneurs who have a track record and/or those they already know and trust. In a softening market, entrepreneurs who are risk averse tend to go to the more traditional firms and shy away from a startup, thereby weeding themselves out. Those entrepreneurs that do truly want to build a startup stay in the game—these are the true entrepreneurs. This is not a zero sum game, though, and in a tighter market getting seed and future rounds of funding is also more difficult. Those investors whose are risk averse may instead look to fund those with the best brand names and best chances to succeed.

When there is uncertainty in the markets, companies within the incubators become a higher risk asset which could foster either a greater need for the right type of incubation to ensure these companies are successful or less of a need if ventures shrink and capital becomes more expensive. Today's public markets are favoring the incubator listings and their funds—certainly a benefit in the short-term. The question remains if this proposition will last under long-term scrutiny of the public eye as well as the gyrations in the markets.

13.9 In a nutshell

Overall, the industry is new and “hot.” There are a handful of incubators that provide obvious value and many more that may not provide as much value but are changing to meet the needs of the market.

Watch out for the effects of the Darwinian Theory of Entrepreneurs, and take measures to counter them. As with any type of new industry or business, there are numerous pitfalls, and there will inevitably be a shakeout. Softening public markets exacerbated by the pending rise of interest rates will result in an increase in the costs of capital. Incubators and venture capitalists alike will be tightening their criteria for new venture incubation and head toward incubation tied with true fundamentals—a combination of New Economy venturing combined with Old Economy fundamentals.

The line between early-stage venture capital firms and that of incubators will become even more blurred with continued forward- and backward-integration. Along these same lines, we may not only see tighter partnering between venture firms and incubators and traditional consulting firms and investment banks, but also perhaps mergers and acquisitions between these firms, especially with access to the public capital markets for all of these institutions. Publicly listed incubators, venture capitalists, investment banks, and consulting firms, may soon be merging with each other. The culmination of these new public models as well as mergers between incubators, venture capitalists, banks, and consultants will drive greater expansion into the international markets where huge potential for all forms of incubators waits and has yet to scratch the surface. This expansion will push the development of more innovative models of operation that we have yet to experience.

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INTERVIEW QUESTIONS FOR INCUBATOR

TIME: APPROXIMATELY 60 MINUTES

Important: When answering, please try not to have later questions influence your answers to previous questions.

1. How do you work with business ideas and teams? Internal and external ideas/teams. Equity requirements, investments, milestones, board seats, advisory seats, etc. What do you offer your ventures (your role, your resources, your processes, recruiting, technical, advisory, other)? Explain each in detail. What if an incubated company doesn't reach its milestones?
2. Is the incubator itself a separate entity (e.g. can it go public), or is it a concept with services (e.g. a portfolio investment fund only)? Do you plan on taking the incubator public (if not already), and if so, what milestones would you need to achieve before this was to happen? If the incubator is already public, at what point was the decision made to take it public? Like a first-fund venture fund, how do you balance the incentive structure of building the incubated company to “last” over building to “flip” (so as to validate the business model)? Do you think you will gain (or have gained) or will lose (or have lost) any benefits inherent in your operations and investing advantages prior to being a public entity (e.g. public disclosure and approval of strategic moves, etc.)? The same question is similarly posed for any companies that your firm has incubated and has gone public.
3. How do you differ from other incubators? Why would entrepreneurs choose your incubator? What are you good at? Is it execution, a big Rolodex and relationships, marketing savvy in a particular segment, or other?
4. How many ventures can you take on? What are your anticipated returns (e.g. how many do you expect to fail, or averaged across the portfolio)? Do you have a co-investment fund? If so, how large of an investment? When do you seek future rounds of funding? What's the expected payout to the General Partners, Limited Partners?
5. Other than your own, what do you think of incubators in general? Do they provide value beyond what a top-tier, or non-top-tier, VC provides? Do you see this changing? Do you currently have a partnership with a VC? If so how are these structured? If not, do you foresee developing these relationships, and if so, how?

6. Do you specialize in a certain industry, product, or service? If not, what do you think of incubators that do have a single focus in an industry or segment? What are your future plans?
7. Do you think the value you're creating in an incubated company is intrinsic to your organization (non-replicable), or just by the sheer "hunger" in the industry for anything Internet or dot.com (e.g. it doesn't matter who does it, just as long as someone does)?
8. How do you think your Term Sheets differ from those of a typical venture capitalist's? Management rights, other rights?
9. Say for instance that Darwinian Theory applies to capital deployment and that the smart entrepreneurs with great ideas find smart capital (e.g. a top-tier VC firm with a big Rolodex—question: is this smart capital?). This then means by the process of elimination that the next-level down of ideas/entrepreneurs go to the incubators. Or, perhaps the market is big enough that the incubators will have some successes as well.

Incubator scenarios. How would you work with them, if at all?

Note: These scenarios pull together the concepts from the previous sets of questions.

1. An entrepreneur with a corporate background (investment banking or consulting) spent the summer working at a startup, recent MBA graduate, and has a great Internet business idea. Has already developed the business idea into a 5-slide pitch presentation but still needs to flesh out the business plan.
2. A scientist who holds a patent developed from within a university, wants to create a business plan around the technology and commercialize it.
3. An A+ team (five smart folks) has put together a business plan that needs some tweaking and will likely change, as all business plans do, and evolve into a great idea.

4. A top-tier VC firm has a deal that came to them. The VC likes the idea and the team, but they feel they need additional help to flesh out the business plan and take it to the next level. Your firm has good relations with this VC, and they trust you.

5. A big corporate firm has a group that specializes in spinning off its internally generated ideas and/or technology and needs assistance to give core focus to the startup, while still maintaining a relationship with the parent.

6. **Hard Question:** Think of an Internet/high-tech firm that you admire (and hope to incubate a venture that has had a similar impact on the market), e.g. Akamai, Sycamore Networks, Amazon, eBay, Yahoo!, etc. Now imagine if your incubator existed when they started, and the founders came to you to be incubated. How would you have helped them? Do you think they might be different today?

INTERVIEW QUESTIONS FOR VENTURE CAPITALISTS

TIME: APPROXIMATELY 30 MINUTES

Important: When answering, please try not to have later questions influence your answers to previous questions.

1. Incubators come in various models and forms. Is there a particular way you would define them?
2. What do you think of incubators in general? Do they provide value beyond what a top-tier, or non-top-tier, VC provides? Speak either generally or with specific examples, if you have any.
3. Do you ever see business plans that aren't just right or missing one or more key components, but think there might be an opportunity? If so, would working with the right incubator be useful in this instance?
4. Would a firm like yours work with an incubator, and how do you foresee that happening? (Many firms are just figuring this out, so even preliminary thoughts would be useful) Like a first-fund venture fund, would you be concerned about the incentive structure of building the incubated company to "last" or building to "flip"?
5. Has your firm funded later rounds of an incubated firm? If so, do you feel there was value in the firm that there otherwise wouldn't have been? Valuation effects?
6. If you don't see value in current forms of incubators, is there an ideal form that you would like to see, and perhaps work with, if at all? Differentiate between U.S.-based and those that are international, considering the challenges entrepreneurs face in other countries.
7. Say for instance that Darwinian Theory applies to capital deployment and that the smart entrepreneurs with great ideas find smart capital (e.g. a top-tier VC firm

with a big Rolodex—question: is this smart capital?). This then means by the process of elimination that the next-level down of ideas/entrepreneurs go to the incubators. Or, perhaps the market is big enough that the incubators will have some successes as well.

8. Do you see your role different from incubators? Do you see yourself as a type of incubator? If so, how many ventures can you take on simultaneously and how do you work with them, aside from your usual way of working with other ventures, or is this how you work with all your ventures?

9. What's your opinion on vertically specialized incubators that have deeper domain expertise in a certain area? Would you be worried about cannibalization within the incubator? How would you balance the lack of industry diversity or too narrow a focus?

**INTERVIEW QUESTIONS FOR VISIONARY
TIME: APPROXIMATELY 30 MINUTES**

Important: When answering, please try not to have later questions influence your answers to previous questions.

1. What do you think of incubators in general? Do they provide value beyond what a top-tier, or non-top-tier, VC provides? Can VCs and incubators work together?
2. If you see or don't see value in general incubators, how about vertically specialized ones that have deeper domain expertise in a certain area? Would you be worried about cannibalization within the incubator?
3. What about VCs and incubators? Are they the same, different, and can they work together?
4. If you don't see value in current forms of incubators, is there an ideal form that you think might work in today's marketplace?
5. Do you think the incubators of today are new business models that will stay? If not, what model do you foresee?
6. Say for instance that Darwinian Theory applies to capital deployment and that the smart entrepreneurs with great ideas find smart capital (e.g. a top-tier VC firm with a big Rolodex—question: is this smart capital?). This then means by the process of elimination that the next-level down of ideas/entrepreneurs go to the incubators. Or, perhaps the market is big enough that the incubators will have some successes as well.

INTERVIEW QUESTIONS FOR INTERNET / TECHNOLOGY ANALYST

TIME: APPROXIMATELY 30 MINUTES

Important: When answering, please try not to have later questions to influence your answers to previous questions.

1. What do you think of incubators in general? Do they provide value beyond what a top-tier, or non-top-tier, VC provides? Can VCs and incubators work together?
2. If you see or don't see value in general incubators, how about vertically specialized ones that have deeper domain expertise in a certain area? Would you be worried about cannibalization within the incubator?
3. What about VCs and incubators? Are they the same, different, and can they work together?
4. If you don't see value in current forms of incubators, is there an ideal form that you think might work in today's marketplace?
5. Have you ever covered a company that was incubated? What did you think of it? Do you think it had an advantage over one that might not have been? Do you feel its valuation was affected in any way?
6. Assuming the incubator is itself a separate entity (e.g. it can go public), as opposed to a concept with services (e.g. a portfolio investment fund only), when do you think such an entity should IPO (e.g. after taking one or two incubated companies public)? Would you be concerned about the incentive structure of building the incubated company to "last" or building to "flip"?
7. In your view, what type of investor invests in publicly traded incubator stocks? Assuming equal transaction costs, would a large investor invest in a publicly traded incubator stock or are there benefits to investing privately, like an angel

investor, or in a VC fund (assuming the VC fund would take their money) where there are preferred shares and liquidation rights for some downside protection?

8. Say for instance that Darwinian Theory applies to capital deployment and that the smart entrepreneurs with great ideas find smart capital (e.g. a top-tier VC firm with a big Rolodex—question: is this smart capital?). This then means by the process of elimination that the next-level down of ideas/entrepreneurs go to the incubators. Or, perhaps the market is big enough that the incubators will have some successes as well.

INTERVIEW QUESTIONS FOR PUBLIC INVESTOR
TIME: APPROXIMATELY 30 MINUTES

Important: When answering, please try not to have later questions influence your answers to previous questions.

1. What size is your entire public portfolio? Private portfolio?
2. Why do you invest in publicly traded incubator stocks?
3. What are your criteria for choosing one incubator stock over another?
4. What portion of your entire public portfolio is invested in incubator type stocks?
5. Do you also invest privately, like an angel investor, or in a VC fund (assuming the VC fund would take your money), where there are preferred shares and liquidation rights for some downside protection? Common stock has no downside protection (assuming you have no option rights).
6. Would you invest in the IPO or post-IPO of an incubated company of an incubator?
7. Are you worried that these incubators are incentives to build to “flip” (e.g. IPO), rather than build to “last” (sustainable growth)? The incubator might need to take its incubated companies public (to validate its business model) so as to get a higher valuation in its own IPO.

INTERVIEW QUESTIONS FOR ENTREPRENEUR
TIME: APPROXIMATELY 30 MINUTES

Important: When answering, please try not to have later questions influence your answers to previous questions.

1. Explain your own background in starting up companies. Include your relevant background (e.g. consulting, banking, operations, marketing, technical, other). On a scale of “1” (no relevant experience in starting firms) to “10” (serial entrepreneur, having taken at least one company to IPO), rate yourself.
2. Do you have an industry focus for your entrepreneurial ideas (e.g. Internet, wireless, other telecom, media, bio-tech, etc.)?
3. What criteria would you use to evaluate an incubator and/or a VC and/or angel investor? Consider domain expertise, relationships/Rolodex, marketing, real estate, recruiting services, technical, and other services.
4. What services do you expect from an incubator? Do you value an incubator beyond a top-tier VC? Why would you not go directly to a top-tier VC?
5. Whether or not you choose to go to an incubator, why do you think anyone else would choose to go to an incubator?
6. How much equity would you expect to give away, and for how much seed funding? What would you expect for that equity? Include the services that you expect.
7. If you wouldn't use an incubator, what type of entrepreneur would, do you think?

**INTERVIEW QUESTIONS FOR
TELECOMMUNICATIONS EXECUTIVE
TIME: APPROXIMATELY 30 MINUTES**

Important: When answering, please try not to have later questions influence your answers to previous questions.

1. What do you think of incubators in general? Do they provide value beyond what a top-tier, or non-top-tier, VC provides? Can VCs and incubators work together?

2. If you see or don't see value in general incubators, how about vertically specialized ones that have deeper domain expertise in a certain area, like telecom, or even more specialized, in wireless? Would you be worried about cannibalization within the incubator?

3. Does your firm have an incubator? If so, please answer the "[Incubator Questions](#)."

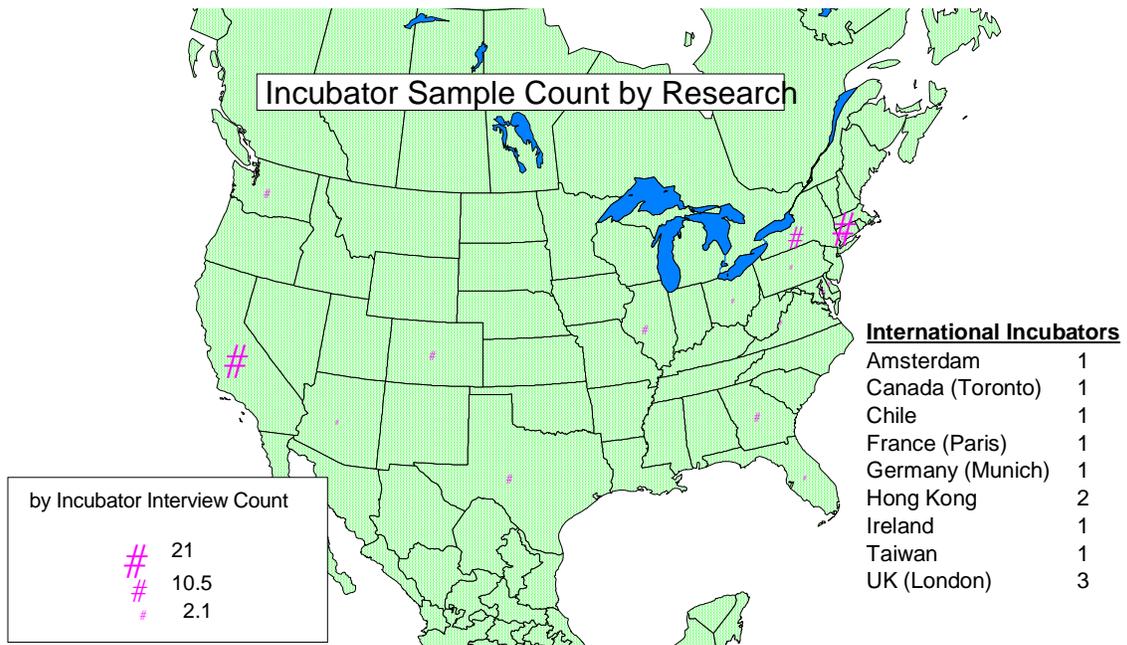
4. If your firm doesn't have an incubator, would you work with an incubator, and how do you foresee that happening (even preliminary thoughts would be appreciated)? Like a first-fund venture fund, would you be concerned about the incentive structure of building the incubated company to "last" or building to "flip"?

5. In the specialized field of wireless-telecom, do you feel a vertically focused incubator with deep domain expertise, a technology lab, and contacts to business and investment professionals within the telecommunications space provide value to a wireless startup looking for help?

6. If your firm has both an incubator and a venture capital fund, how do the mechanics of funded (VC only) and incubated firms work?

External Scenarios 1-5 (as posed to incubator founders):

1. An entrepreneur with a corporate background (investment banking or consulting) spent the summer working at a startup, recent MBA graduate, and has a great Internet business idea. Has already developed the business idea into a 5-slide pitch presentation but still needs to flesh out the business plan.
2. A scientist who holds a patent developed from within a university, wants to create a business plan around the technology and commercialize it.
3. An A+ team (five smart folks) has put together a business plan that needs some tweaking and will likely change, as all business plans do, and evolve into a great idea.
4. A top-tier VC firm has a deal that came to them. The VC likes the idea and the team, but they feel they need additional help to flesh out the business plan and take it to the next level. Your firm has good relations with this VC, and they trust you.
5. A big corporate firm has a group that specializes in spinning off its internally generated ideas and/or technology and needs assistance to give core focus to the startup, while still maintaining a relationship with the parent.



State	Incubator I
AZ	1
CA	20
CO	2
CT	2
DE	1
FL	1
GA	2
IL	2
NY	1
MA	21
MD	1
NY	9
OH	1
PA	1
TX	2
VA	1
WA	2

23 APPENDIX X—CONTRIBUTORS

Additional contributors that were interviewed after May 1, 2000 are listed at <http://chinsomboon.com/incubator>, and their comments will be included in the extended version of this study.

Incubators

3Com
American Computer Foundation
Arizona Technology Incubator
Artemis Ventures
Benchmarking Partners
Blumberg Capital
Boulder Tech Incubator
Breakthrough Commerce
Brightspark (Canada)
Cambridge Incubator
Cambridge Technology Partners
CampSix
CenComV
Concrete Media
Divine Interventures
DotCom Ventures
eCiti (Citibank)
eCompanies
eHatchery
ehive
E-Start.com (London)
eVentures (Chile)
Garage.com
GasPedal Ventures
Gorann
Gorilla Park (Amsterdam)
HotBank, i-Group
iBelay.com
idealab!
Incube8.com
Intend Change
Internet Capital Group (Nasdaq: ICGE)
iStartVentures
KnowledgeCube
Koos Group Next Group (Taiwan)
LabMorgan (JP Morgan)
Long Island High Technology Incubator
Lycos Labs
McKinsey Accellerator
NetValue Holdings (OTC BB:NETV)
NewcoGen
NVST.com

Panasonic Internet Incubator
Proctor & Gamble iVentures Incubator
Reach Internet Incubator
Reactivity
Redstone7
Rensselaer Polytechnic Institute Incubator Program
Science and Technology Campus, Ohio State University
StartupAvenue (France)
StartupNetwork.com
The Nelson Companies
TheElevator.com
Trilogy
Venture Frogs
XL Vision
YankeeTek

Venture Capital Firms

21st Century Internet Venture Partners
Accel Partners
Alta Partners
Bank of America Venture Partners
Boston Capital Ventures
BPI Capital Partners, Inc.
Clarion Capital Partners
Commonwealth Capital Venture Partners
Draper Fisher Jurvetson
East River Ventures
Flatiron Partners
Gorann
Greylock
Matrix Partners
Motorola Ventures
Polaris Ventures
Sequoia Capital
Shaw Venture Partners
Silicon Valley Bank
Softbank Ventures
SpaceVest
SUN Technology
Trinity Ventures
Venrock Associates
Zero Stage Capital
Zone Ventures

Others

[George Gilder](#) of the [Gilder Technology Report](#)

John Hagel (author of Net Worth) @ [McKinsey](#)

[National Business Incubator Association \(NBIA\)](#)

[Neuvis](#)

[RedHerring Magazine](#)

[Robertson Stephens & Co](#)

[US Bancorp Piper Jaffray](#)

[Warren Buffett](#), [Berkshire Hathaway](#) (question posed during Q&A at MIT Sloan on 4-20-00)

Other individual investors and entrepreneurs

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