



# Beyond Venture Capital

5 funding options for start-ups that might not have crossed your mind

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## *America's Network*

In the recent past, start-up providers of telecom equipment and services enjoyed easy access to venture capital financing and a fast ride to IPO or M&A riches. No more.

Today, the early-stage front-end of the funding pipeline is under pressure because of significant reductions on the back end. IPOs, when they happen, are far fewer, and we see only a mere handful of acquisitions at reduced prices.

But all is not gloom and doom. There is probably more venture capital money on the sidelines than ever before. The problem is that much of it will go to later stage companies because many venture investors have shifted their focus away from pre-revenue, pre-product, "three-PhDs-in-a-garage" start-ups. A handful of early stage venture firms continue to fund great teams with nothing more than a great concept, but much of the industry now prefers to get involved at the commercialization/growth phase versus the early research and development stage (See Figure 1).

The challenge for today's entrepreneur is how to finance initial R&D activity to complete first product and secure those initial revenues, which then facilitates raising venture capital. For those proven teams fortunate enough to land outside funding at the concept stage, the challenge becomes one of complementing these equity dollars with additional resourceful funding to ensure that you reach customer-validating revenues without the need for more fundraising. There are several options.

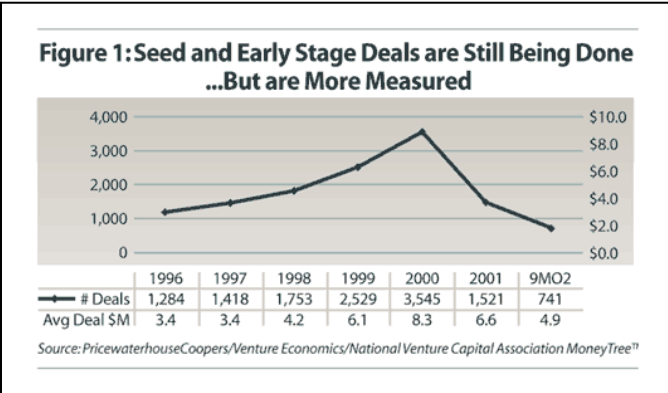
### **1. Back to the Basics: Bootstrapping**

While not necessarily true during the bubble years, it's no secret that starting a company today usually requires some financial sacrifice or personal funding. Bootstrapping is a common and venerable way of starting a business, and entrepreneurs should be prepared to weather



the early start-up period with a reduced or non-existent income, and in most cases, a cash investment in the business. Make sure your family and personal finances are prepared for this. Sources for this initial funding include savings, credit cards, second mortgages, consulting work and customer advances.

Perhaps the best of all possible funding options is a customer who is willing to pay for R&D work. This type of contract engineering is a great means of starting a business. It not only provides much needed revenue, but it puts you on the front lines with customers to ensure exposure to the opportunities, which will guide your eventual product or service. The basic theme plays out as follows: A startup with a great solution to a problem finds a customer that needs the solution and convinces the customer to pay for development, while ideally retaining rights to the final product. The startup then builds the product, solves the problem, generates revenue, secures a customer reference, and maintain rights to as much of the work as possible to serve as the basis for a commercial product launch.



Other bootstrapping tactics include obtaining prepaid licenses, royalties, or advances from customers, or developing products during off-hours while working elsewhere. Creative entrepreneurs might also obtain free access to

development hardware and critical lab facilities-from a current employer, university or a well-placed friend-and thus defer capital equipment costs.

Angel investors continue to be a prime funding source for many startups. These high net worth individuals are often cashed-out entrepreneurs who actively invest in the industry they know best and provide the mentoring expertise of someone who has been there before.

## 2. Incubators

Business incubators come in two flavors: assistance from an established company or past employer, and the more formal programs

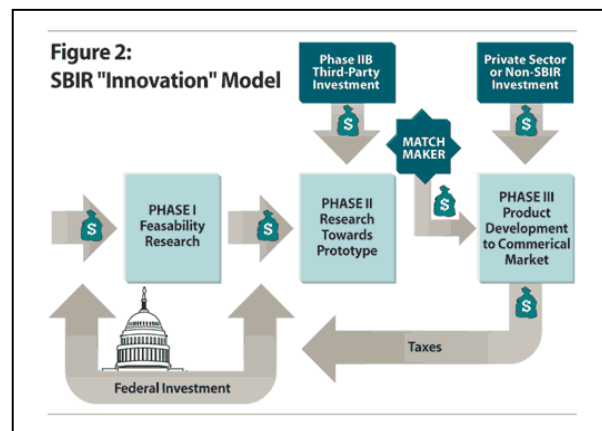
and facilities provided by states, counties and universities.

In the second instance, government- or university-sponsored incubation programs offer reduced rent, furnished offices, access to lab facilities, equipment and communications infrastructure. For many infrastructure-dependent tech startups, acquiring facilities and equipment on a standalone basis otherwise would cost millions of dollars. Moreover, many state-run incubators also provide access to mentors, attorneys, accountants and university research faculty-which all serve to accelerate the company-building process and free the founders to focus on their technical pursuits rather than the logistics of office space and T1 lines.

### 3. Uncle Sam

The federal government is arguably the nation's largest funding source for early stage R&D. Two programs in particular-the Small Business Innovation Research (SBIR) program and the Small Business Technology Transfer (STTR) program-award \$1.6 billion annually through participating government agencies. These are often the ideal funding vehicles to validate a concept, prove that the science works and develop a prototype.

SBIR grants fund high-risk, early-stage research. Distinct advantages of the program are that SBIR funding allows researchers to retain ownership of intellectual property and lets companies establish a bid-advantaged sole source position with the world's largest customer-the U.S. government. Participants must be American-owned, independently operated, for-profit businesses with under 500 employees, and the principal researcher must be employed by the business.



Ten federal departments and agencies provide SBIR awards, including the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, and Transportation, as well as the Environmental Protection Agency, NASA, and the National Science Foundation.

SBIR awards are based on innovation, technical merit and market potential, and run in three phases. Phase I provides awards of up to \$100,000 for six months to determine technical merit and feasibility. Successful Phase I efforts proceed to Phase II, which features awards of up to \$750,000 for as many as two years for R&D and commercial evaluation. In the unfunded Phase III, the company moves from the laboratory into the marketplace and must find private or other non-SBIR federal funding.

STTRs are similar to SBIRs in the eligibility criteria and phases, but require teaming with a non-profit research institution in the U.S. While there is no size limit, the research institution must be a nonprofit college or university, a domestic non-profit research organization, or a federally funded R&D center. Phases I and II feature awards of up to \$100,000 and \$500,000, respectively. As with SBIRs, participants must seek non-STTR funding in Phase III.

Numerous federal agencies also award billions in funding to credible technology companies, including start-ups, through additional programs administered by each agency. Some of the more notable funding agencies include the Defense Advanced Research Projects Agency, the new Homeland Security Advanced Research Projects Agency, the National Institute of Standards and Technology, and the research offices of each branch of the armed forces-the Office of Naval Research, the Air Force Office of Scientific Research and the Army Research Office. These funding opportunities often take the form of a Broad Agency Announcement (BAA) released by each agency to solicit proposals for research and development in specific fields of interest. Each agency's website readily advertises these opportunities. Government procurement opportunities, which differ from funded research, are posted by law on [www.FedBizOpps.gov](http://www.FedBizOpps.gov) (formerly called Commerce Business Daily).

#### **4. State Governments**

Many states also run programs to directly assist pre-revenue tech startups. New Jersey, Maryland and others have loan programs that provide investments to in-state companies in amounts ranging from \$50,000 to \$250,000. In many instances, the company pays back only the principal.

Some states also operate STTR-like programs to fund joint development work between startups and research universities, giving



companies access to world-class academic researchers and facilities. Maryland's Industrial Partnerships program (MIPS) is one such example. Virginia, New Jersey and others run similar programs.

New Jersey, Connecticut, and Hawaii allow high-tech companies to convert into cash such tax benefits as net operating loss carryovers and unused research and development tax credits. Texas and California are contemplating similar programs. These programs allow startups to monetize unused tax benefits by selling them to established companies, effectively using the state's corporate income tax system to provide financial assistance.

Last, but not least, cities and counties often provide incentives to new businesses. In addition to operating incubators and providing relocation assistance, many localities have programs, often in the form of tax breaks, designed to attract and retain new and existing tech businesses. Washington, DC, for example, provides tax credits and relocation expense reimbursement for technology companies that locate in the city.

## **5. Venture Capitalists**

Rumors that venture capitalists have stopped investing are greatly exaggerated. Like everything else associated with the heady tech boom, the venture industry has settled back into a more normal existence. But lessons learned in the tech sector in the 1990s have indeed made firms more selective in choosing their investments, and more prone to invest in companies beyond the concept stage.

Alternate funding options are a terrific precursor or partner to venture capital financing. But unless you have a proven team or meaningful revenue, spend those first precious months chasing customers rather than venture dollars.

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