

The Start-up Handbook



UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN • CHICAGO • SPRINGFIELD

©2014 • THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS
ALL RIGHTS RESERVED • 1ST PRINTING, SPRING 2014

TABLE OF Contents

INTRODUCTION 4

FORMING YOUR BUSINESS 5

Making the Decision to Form a Business	5
Feasibility considerations	5
Validating Your Idea	6
Intellectual Property and Your Business	7
Inventions and Patents	7
Copyright	7
Licensing Intellectual Property from the University	8
The University's System for Technology Transfer	8
Licensing	9
License Negotiations	9
Developing a Business Plan	10
Points to Remember when Preparing the Business Plan	11
Entities and Legal Formation of a Business	12
Business Entities at a Glance	13

Marketing	14
Marketing Analysis (The Five C's)	14
Segmentation, the Target Market, and Positioning (STP)	15
Marketing Mix (The Four P's)	16

UNIVERSITY RESOURCES FOR START-UPS ..18

University Resources for Start-ups	18
Proof of Concept funding	18
The Offices of Technology Management	19
University of Illinois Research Park	19
EnterpriseWorks	19
EnterpriseWorks programs	19
EnterpriseWorks Chicago	21
IllinoisVENTURES	22
Resources for Student Entrepreneurs	23

FUNDING YOUR BUSINESS 25

Types of Funding 25

Funding Sources 25

 Self-Financing 25

 Bootstrapping 25

 Federal Grants 25

 Loans 26

 Business Plan Competitions 26

 Joint Ventures 27

 Angels 28

 Venture Capital 28

Securing Funds 28

 The Business Plan 29

 The Business Team 29

 The Investor 30

HUMAN RESOURCES 31

Standard Labor and Employment Laws 31

 Fair Labor Standards Act (FLSA) 31

 Workers' Compensation 31

 Unemployment Insurance 31

 Equal Employment Opportunity 31

 Tax Withholding 31

Employment Eligibility and New Hire Requirements 32

Non-Disclosure and Non-Compete Agreements,
Conflict Acknowledgements 32

ONLINE RESOURCES 33

CONTACTS 34

Introduction

Innovations generated by University of Illinois research have a profound impact on human issues and the creation of businesses, jobs, and economic well-being. There are many ways to translate University technology and innovation into societal benefit; starting a company is one of them. The University has put in place a unique and comprehensive system supporting entrepreneurship and economic development.

For a new entrepreneur, the question is where to start. The Office of Technology Management is proud to present this handbook as an introduction to both the University's resources and to basic business concepts and considerations. We hope you find it useful.



Forming Your Business

Making the Decision to Form a Business

Starting a company is one way to further develop and commercialize technologies created at the University of Illinois. Several factors should be weighed when deciding whether to form a business. These considerations comprise a feasibility checklist and can be divided between external and internal factors.

FEASIBILITY CONSIDERATIONS

External considerations concern the marketplace for the start-up's product as well as the potential performance of the product in that market.

Factors include:

- What product or service the start-up will offer
- Whether the product or service satisfies a need that people value
- The price a customer would pay for the product or service
- The market's size and effect on start-up profitability
- The regulatory landscape

Identifying the **market need** can be a challenge if your expertise is in technological development and innovation rather than marketing and technology commercialization. You should note that, no matter how innovative a technology is, if it does not address an **actual need** at a price which customers are willing to pay, the technology has no market. If your start-up's technology does not solve an actual problem at a competitive price, then the start-up is more likely to fail.

It is important to **understand the market** in which your technologies will compete. Knowledge of a market can be acquired through professional market research, government data, trade publications, and networking with prospective customers. The decision to form a start-up should be made only after acquiring a strong understanding of the market and how your product or service would fit into that market.

Internal considerations concern your commitment and willingness to start a business.

Factors include:

- Available time
- Personal resources
- Risk tolerance
- Resilient and flexible attitude
- Managerial support

Starting a business requires a large time commitment, and it is not uncommon for new entrepreneurs to underestimate the time needed. Additionally, you should consider your personal resources and whether you are comfortable committing those resources to the endeavor, although it is not always necessary to do so.

Furthermore, while starting a business can lead to tremendous wealth, it comes at significant risk. The reality is that many start-ups fail. You should be willing to accept this risk. Finally, unforeseen challenges will always arise when starting a business. Consequently, it helps if you can adapt quickly to changing conditions and remain committed to the endeavor, or recognize when to stop.



Validating Your Idea

When you are contemplating starting a company, one of your first steps should be to assure that you are creating a product or service that customers will buy. **The Customer Development Model**, created by Steve Blank*, can help you do this.

The model consists of four steps — customer discovery, customer validation, customer creation, and company building. Because each step is recursive, you may remain in each for any duration of time, refining and repeating the processes involved.

1. Customer Discovery

Target potential customers and determine if the problem your product solves is important to potential buyers.

2. Customer Validation

Develop a sales process that successfully sells your product.

3. Customer Creation

Build on the sales accrued during customer validation and begin to put money into marketing your product.

4. Company Building

Transition the company from an informal development team into a formal entity.

On the Urbana campus, companies can pursue this validation process through the **NSF I-Corps program** which is designed to help University entrepreneurs recognize product opportunities arising from academic research. See page 20 for more information.

Starting a Company While Remaining at the University

When a start-up includes one or more University faculty members or other University employees, **conflict of interest** should be addressed. Depending on the circumstances, a conflict of interest management plan may be needed.

This plan outlines the relationship between your activities with the company and your research and teaching responsibilities (see box on page 7). The plan identifies and mitigates possible areas of conflict, such as those related to conflict of commitment and/or conflict of interest, as well as prepares for disclosure and management of these conflicts. To initiate a conflict of interest management plan, contact the Office of the Vice Chancellor for Research (OVCR) on your campus.

*For additional information on the Customer Development Model, consider reading *The Lean Startup* by Eric Ries and *The Four Steps to the Epiphany* by Steve Blank.

Intellectual Property and Your Business

For many faculty start-ups, intellectual property is the business' key asset and gives the start-up a competitive advantage. The following subsections briefly discuss intellectual property in the form of inventions and patents, as well as copyright. For a more in-depth review, please refer to the *Handbook for Inventor's and Innovators* or talk to your Office of Technology Management (OTM).

INVENTIONS AND PATENTS

An invention can be anything man-made that is new, useful, and non-obvious. Inventions may include, but are not limited to, processes, methods, machines, articles of manufacture, devices, chemicals, and compositions of matter. Inventions can be protected by patents.

U.S. law recognizes the value of innovation to the economy and provides the owner of a patent with a time-limited monopoly (20 years) to prevent others from exploiting the invention without permission. In exchange for this exclusive right, the published patent document must fully describe the

invention so that others can reproduce and learn from it. In that way, the patent monopoly provides the incentive to share advances with the public and thereby contribute to growth in the field.

Inventorship

Inventorship is defined by U.S. patent law. Broadly, an inventor is one who alone, or together with others, conceived of the ultimate working invention. A patent application must be filed in the names of the true inventors. The legal criterion for inventorship is not the same as that for academic authorship. Inventorship is not a reward for hard work to someone who only worked under direction. Inventorship is tied to the claims in a patent application and is determined at the time the patent application is filed. As the claims in a patent application change, so may inventorship.

Ownership

Inventorship does not equal ownership.

Organizations usually own the inventions developed by their employees. The Board of Trustees of the University of Illinois owns University of Illinois patents, as established by Article III of the University's General Rules.

COPYRIGHT

Copyright is the form of intellectual property that protects the expression of a creative idea that is fixed in a tangible form. It is an acknowledgement of who created the work.

Conflict of Interest Responsibilities

- Obtain prior written approval to engage in non-University income generating activities.
- Disclose such activities annually, whenever a substantial change occurs, or when required by granting agencies.
- Refrain from spending so much time on external activities that they interfere with your University responsibilities.
- Refrain from advancing your own interest or the interest of family members to the detriment of the University's interest.
- Disclose involvement of University students or employees in your external activities.
- Work with the department head to identify and evaluate potential conflicts, and manage or eliminate them.

For example, in *The Wizard of Oz*, copyright protects the order of the words in the story, as well as the layout of the pictures, color, and words on the page. The ideas, plot, and characters are not protected. Each adaptation of this classic tale (book, screenplay, movie, music) generates independently copyrighted works.

For scientific writing, copyright does not protect the procedures, systems, processes, concepts, formulas, discoveries, or devices described in the work. Similarly, for software, copyright does not protect the underlying concepts, processes, systems, algorithms, program logic, or layouts.

Copyright constitutes a bundle of legal rights, which include the right to copy, display, perform, distribute, and make changes to the original copyrighted work. These altered versions of original works are known as **derivative works**. Copyright provides the owner with the right to determine how the work is copied and distributed to others, such as through traditional or online publication, open access, sale, lease, or lending. It also gives the copyright holder the right to charge royalties for a work's use.

Automatic Application of Copyright

Unlike patentable inventions, copyrighted works are automatically protected under U.S. copyright laws without having to undergo a formal registration process. However, it is still important to affix an appropriate copyright notice to notify others that they are not free to utilize

the work without permission. Works owned by the University should bear the following copyright notice: © 20XX The Board of Trustees of the University of Illinois. All rights reserved.

There is also a formal registration process to document copyright in the Library of Congress.

Author owned copyrights last for the life of the author(s) plus 70 years after the last surviving author's death. Employer owned copyrights last for 120 years from the work's creation or 95 years from the first publication of the work, whichever is shorter.

Licensing Intellectual Property from the University

Usually, the cornerstone asset of a faculty start-up is the intellectual property owned by the University. The following sections briefly discuss the University's system for transferring intellectual property into a start-up via a license. For more detailed information concerning intellectual property and the University's process to evaluate and protect intellectual property, see *A Handbook for Inventors & Innovators*.

THE UNIVERSITY'S SYSTEM FOR TECHNOLOGY TRANSFER

The University has resources designed to facilitate all stages of the technology transfer process. Overseen by the **Office of the Vice President for Research (OVPR)**, the University's technology commercialization infrastructure is comprised of several entities and many programs.

Entities

- The **Offices of Technology Management** on the Urbana and Chicago campuses evaluate, patent, and license the University's intellectual property.
- **IllinoisVENTURES LLC** provides consultative services, funding, and business development support for early stage, research-driven companies, particularly those deriving from the University of Illinois, other Midwestern universities, and Federal laboratories.
- **The University's Research Parks and incubators** in Urbana and Chicago facilitate the growth of early stage companies, encourage R&D collaboration between the University and private industry and public agencies, and attract established companies that benefit from close working relationships with University faculty and students.

Each of these entities, along with many other units, offers many supporting programs for entrepreneurs.

For more information, see the University Resources for Start-ups section on page 18.

LICENSING

A license is a written agreement granting some or all of the University's rights as owner of an intellectual property (licensor) to a company (licensee). The licensee undertakes certain obligations and responsibilities to commercialize the intellectual property.

The University licenses its varied technologies (patents, software, databases, creative works) to companies or individuals that demonstrate the capability and commitment to develop early stage innovations into commercial products or services.

If you would like to license University technologies for use in your start-up, you will be asked to demonstrate such commitment by providing a **written technology and business development plan**. This plan should include but is not limited to a description of the technologies to be licensed, the resulting product, market analysis, a product development timeline, and the company resources committed to development.

The terms of the license are negotiated based on factors such as the type of technology, the industry area, the level of development, the time to market, and the licensee's commercialization plan. The terms should anticipate potential pivots in the company's strategy to accommodate the market or the product.

LICENSE NEGOTIATIONS

The licensing process begins by discussing a term sheet summarizing the essential business terms of the agreement. Below are the types of business terms generally addressed.

Scope of License Rights

License rights — such as exclusive, nonexclusive, field-of-use limitations, and territory limitations — are established to be commensurate with the licensee's product development plans and the market. **The University's licensing objective is to obtain widespread use of its technologies through a well thought out commercialization plan.**

License Fee

An initial fee based on the scope of license rights and the University's investment in the intellectual property.

Royalties

Your company will be expected to pay royalties when products or services that require the use of the technology are sold or transferred. Royalties can be expressed as a percentage of sale or a fee per selling unit. Royalty rates vary according to the industry,

the significance of the invention to the product or service, and the base upon which the royalty is applied (e.g., unit, component, subsystem). Royalty payments may be structured in different ways, such as one-time or recurring fees.

Sublicense Sharing

Exclusive licenses usually allow the right to sublicense, or authorize others to make, use, and/or sell the University's technology to facilitate widespread use. Revenues you receive from sublicenses are also shared with the University.



Minimum Royalties

Minimum royalty payments are established to encourage **diligence in developing and selling products or services** based on the technology.

Patent Reimbursement

Recovery of the costs incurred by the University for protecting the technology in the U.S. and other countries is part of the license. Typically, patent costs that accrue prior to licensing are repaid via a payment plan, while patent costs during the term of the license are paid as they are incurred.

Performance (Diligence) Milestones

University technologies often require significant additional development before they are ready for the market. You will be asked to provide periodic reports and meet specific milestones in order to retain the license, especially an exclusive license. **Milestones are usually industry specific.**

License Compliance

After you license University technology, your Office of Technology Management will manage the license to ensure all terms and conditions are adhered to and the technology reaches its fullest potential.

If the terms and conditions are not met, the license may be terminated or revised, in which case the invention may become available for licensing to another company.

Developing a Business Plan

A business plan is a strategic description of how your start-up will advance its technology and achieve profitability and success. It is a living document and will need to be revised to reflect the changing conditions of the business and the market in which it operates.

The true value of developing an initial business plan is not the finished product itself, but the research and thought behind the plan. Creating a business plan helps you systematically consider all aspects of the business. Additionally, **a business plan is critical for a start-up that is trying to secure external funding.** The business plan demonstrates to outside investors that you have thoroughly explored both the market and how your product or service fits in that market. The level of detail in the plan will depend on the types of investors or funding you are seeking.

The remainder of this section will look at some of the most important parts of a business plan. However, it is not a comprehensive guide, but an introduction to the various elements you should consider.

Executive Summary

The executive summary is a **snapshot of the business.** It acts as an elevator pitch and is usually the first opportunity to catch the interest of an

investor. Consequently, it is the most important part of the plan. It should answer these questions:

- What is the company's mission?
- Why is it important?
- How will the company make money pursuing its mission?
- How will the company develop its technology into products?
- What experience do the founder and management team have?
- How much money is necessary?
- What level of return can an investor expect?
- Why that level of return?

Business Description

The business description provides more extensive information concerning your company's mission than was provided in the executive summary. If the executive summary is an elevator pitch, then the business description is similar to an extended, more descriptive elevator pitch, helping investors quickly understand the business' goals and its unique position. The business description should include:

- The nature of the business and the marketplace needs the business will satisfy
- An explanation of how the start-up's products, technologies, or services address those needs
- The specific companies or customers the start-up will serve
- The competitive advantages the start-up has, such as personnel, technology, or value creation

Market Analysis

The market analysis presents market research showing the current state of your start-up's industry segment, as well as **the target market for your product or service**. At a minimum, the market analysis should contain:

- A specific description of the target market
- The revenues and growth rates of the market, including a five-year projection
- A demonstration of a strong market need for your product or service
- A competitive analysis
- The results of marketplace interviews or other primary market research

Investors want to know that you have carefully considered and fully understand the market your start-up will target. Further, the market analysis must honestly address the competitive environment. Unfortunately, there is no market that is void of competition, and investors are keenly aware of this. Even new products in so-called "uncontested markets" face indirect competition from substitute offerings. The analysis should acknowledge this reality.

Additionally, most investors want to see independent evidence of market validation. Examples of this include the results of your market research, customer surveys, and interviews.

Marketing Plan

There are many factors that go into the marketing process, which will be highlighted in greater detail in the Marketing section of this handbook (page 14). For the business plan, it is important to show how your product or service will be positioned in the minds of customers versus the competition. Elements deserving consideration are:

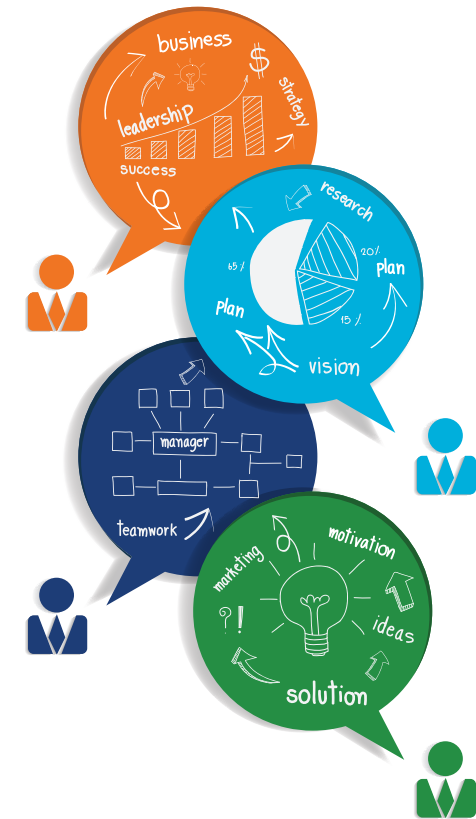
- Key factors in the customer selection process
- **Customer perception** of competitor performance in the key factors
- How your start-up's offering will perform in the key factors
- Market share goals and how they will be achieved

Management Team

The management team section defines the roles of the management team and presents their biographies. Investors prefer to see that the team has relevant business and technical experience.

Financials

The financials should provide the current status of the business and **a realistic expectation of its position after five years**. The goal is to determine the cash needed for the start-up to succeed, as well as the reasonable revenues and profits that can be expected from the investment. A five-year projection will necessitate making some assumptions. These assumptions should be noted. You should also be prepared to justify on what basis the assumptions were made. Additionally, this section should detail how any cash invested in the business will be used.



POINTS TO REMEMBER WHEN PREPARING THE BUSINESS PLAN

To reiterate some of the most important concepts you should be mindful of when preparing the business plan:

- **Focus on the customer and the market need,** NOT on the technology
- Acknowledge your competition honestly
- Include elements of the strategic plan
- Ask for ongoing feedback from an experienced entrepreneur
- Discuss current capital structure
- Make sure the plan flows narratively from section to section
- Keep the business plan as succinct as possible

Entities and Legal Formation of a Business

Business entities are ways to classify the organization of your business as recognized by law. While you have many entity options available to legally form the business, there are three that merit particular attention because they are common entities for technology-driven start-ups: C corporations, Limited Liability Corporations (LLCs), and S corporations. These entities differ significantly regarding taxation, ownership, fundraising, governance, and employee compensation.

Selection of the business entity that best suits a particular start-up should be done with the consultation of an attorney and/or accountant who has experience advising start-up companies. Consequently, the following sections are meant as an introduction to common business entities and should not be construed as professional advice.

C Corporations

C corporations are separate taxable entities from their shareholders. Consequently, the earnings of a C corp are generally taxed twice: first at the corporate level based on the taxable earnings of the corporation, and then at the shareholder level based on distributed dividends. C corporations may have an unlimited number of shareholders who are not required to manage the corporation's day-to-day operations.

Generally, venture capital investors prefer to invest in C corporations because of a C corp's ability to issue preferred stock to investors. The structural accountability of a C corp is well-defined, with management reporting to the board of directors. C corporations can issue incentive stock options to employees, giving employees an equity stake in the success of the corporation.

LLCs

For tax purposes, LLCs are flow-through entities. Corporate revenue is not taxed at the corporate level but passes through to the LLC's owners, where it is taxed at the individual level. Like C corporations, LLCs may have an unlimited number of owners. However, transference of ownership is more difficult, usually requiring the approval of the other owners. For this reason (among others not touched on here), venture capital investors generally do not favor investing in LLCs.

Additionally, the pass-through tax treatment of LLCs can cause undesirable taxable income to investors. LLCs generally operate without the formalities of a C corp, with the owners managing the day-to-day operations. An LLC may offer membership interests to employees, but cannot offer incentive stock options.

S Corporations

S corporations, similar to LLCs, are generally flow-through entities for tax purposes, with the S corp's taxable income distributed to its shareholders in equal proportion to their ownership share. S corporations may have no more than 100 shareholders. Additionally, the shareholders must be individuals, with some limited exceptions.

Like C corporations, S corporation ownership transference is flexible. However, S corporations do not have the ability to issue multiple classes of stock. Most venture capital investors want preferred (rather than common) stock as a condition of the investment. Consequently, S corporations are generally unattractive to professional investors.

S corporations closely mirror the accountability standards of C corporations. S corporations may issue incentive stock options to employees. However, unlike C corporations, Federal law restricts S corporations from issuing stock to certain individuals, most notably non-U.S. citizens and non-U.S. residents.

BUSINESS ENTITIES AT A GLANCE

	C Corp	LLC	S Corp
Liability	<ul style="list-style-type: none"> Shareholders are not typically responsible for the debts of the corporation. 	<ul style="list-style-type: none"> Members are not typically responsible for the debts of the LLC. 	<ul style="list-style-type: none"> Shareholders are not typically responsible for the debts of the corporation.
Tax Implications	<ul style="list-style-type: none"> Taxed at the entity level. If dividends are distributed to shareholders, dividends are also taxed at the individual level. No pass through of income or loss. Double taxation if income is distributed to shareholders as dividends. 	<ul style="list-style-type: none"> If properly structured there is no tax at the entity level. Income or loss is passed through to members. No double taxation. 	<ul style="list-style-type: none"> No tax at the entity level. Income or loss is passed through. No double taxation.
Complexity of Formation and Management	<ul style="list-style-type: none"> State filing required. Board of directors, annual meetings, and annual reporting Managed by board of directors who are elected by shareholders. 	<ul style="list-style-type: none"> State filing required. Some formal requirements, but less formal than S and C corporations Members have an operating agreement that outlines management responsibilities. 	<ul style="list-style-type: none"> State filing required. Board of directors, annual meetings, and annual reporting Managed by board of directors who are elected by shareholders.
Effect on Ability to Raise Capital	<ul style="list-style-type: none"> Shares of stock are sold to raise capital. No limitation on the number of shareholders, different stock classes allowed (which is preferred by investors). 	<ul style="list-style-type: none"> Possible to sell interests, though subject to operating agreement restrictions. No limitation on the number of members, and different classes of ownership are allowed. 	<ul style="list-style-type: none"> Shares of stock are sold to raise capital. Limited to 100 shareholders. Only one stock class allowed. Only U.S. citizens and residents may hold shares. Easier to convert to a C corp than an LLC if venture capital is sought.

Courtesy of Singleton Law Firm, P.C.

Place of Incorporation

In addition to deciding which type of entity is best for the start-up, an entrepreneur must also determine in which jurisdiction to incorporate the business. Often entrepreneurs will incorporate the start-up in their home state, however, many venture capital firms prefer — or even insist upon — incorporation in Delaware because of Delaware’s predictable and business friendly laws. Before making any decision, it is best to consult with an attorney to help weigh the pros and cons concerning different places of incorporation.

Commercial Liability Insurance

Liability insurance is mandatory for all companies and is explicitly required before a company can lease space in EnterpriseWorks. Insurance for businesses is usually packaged as “general business insurance” and can cover everything from personal injury and product liability to company vehicles.

Marketing

The essence of marketing is the process by which firms identify, create, provide, capture, and sustain value for their customers. Value is the benefit provided to the customer.

There are many good resources to assist you in the marketing process. This section is an introduction to some of the major principles of marketing and is meant as a starting point in understanding the marketing process.

MARKETING ANALYSIS (THE FIVE C'S)

A preliminary market analysis focuses on five main areas of consideration: customers, company, competitors, collaborators, and context.

Customer Needs - What needs does the business seek to satisfy?

You should know the specific market need your offering satisfies. This, however, is not enough. Aside from thoroughly understanding your customer's needs, **an in-depth analysis of customer usage patterns and buying decisions is also necessary for effective marketing.** Keep in mind that purchasing decisions are often a collaborative process and not solely at the discretion of the user. Researchers have identified definitive roles

involved in the purchasing process. These roles include the initiator, the decider, the influencer, the purchaser, and the user. While an individual may occupy several or all roles, this is not always the case. For example, the eventual decision to purchase desktops for an office may be made by the company's CFO, but the users will actually be the company employees. Further, the company's IT department will likely influence the decision.

In addition to the purchasing process, you should **understand your customers' decision making process.** Considerations include, but are not limited to, whether your customers search for information before making a purchase, and if so, in what manner? What are the criteria your customers use in evaluating alternatives? You should understand all aspects of your customers' processes for evaluating and purchasing, as well as how your product or service fits into that process.

Company Skills - What special competence does your company have to meet customer needs?

The marketing analysis should include an honest assessment of your business' strengths and weaknesses. Considerations should include the company's financial footing, production capability, and other assets (such as IP).

Competition - Who competes with your company in meeting those needs?

Competitors include not only those currently in the market, but future competitors either in the form of new entrants to the market or substitute offerings. You should assess the strengths and weaknesses of these competitors to better determine how to differentiate your start-up in the minds of consumers. Additionally, the marketing analysis should address the motivations and strategies of your competitors so that you can anticipate the likely reaction of rivals to new competition.

Collaborators - Who should your company enlist to assist and how do you motivate them?

Collaborators include upstream suppliers and downstream distributors. Developing a strategy to gain the support of industry collaborators entails a thorough knowledge of the collaborators cost structures, margin expectations, and relationships with competing firms.

Context - Are there cultural, technical, and/or legal factors that limit your firm's options?

You should understand the environment in which your business will operate. This context (or climate) includes macroeconomic factors such as the political and regulatory environment, the economic environment, the social and cultural environment, and the technological environment.

SEGMENTATION, THE TARGET MARKET, AND POSITIONING (STP)

Once the situational analysis is completed through the five C's, the next steps are to define how to identify customer segments within the market, determine which of those segments to target, and position your company in the minds of customers.

Segmentation

Market segments are groups of potential customers who share certain traits. Commonly used bases for segmentation include demographic (e.g., age, income, gender, occupation), geographic (e.g., nation, region, urban vs. rural), and lifestyle (e.g., single vs. family oriented). However, these broad categories are only starting points to determine how the market is best segmented. Additional segmentation can take the form:

- User status: non-user vs. user
- Usage rate: light, medium, heavy user
- Benefits sought: performance-oriented vs. price-oriented
- Loyalty status: none, moderate, strong, totally loyal
- Attitude toward product: unsatisfied, satisfied, delighted

Target Market

You should consider the following factors when determining which segments to target:

- The comparative strengths and weaknesses of your offering compared to the competition

The Marketing Process



Positioning Statement Formula:



- Your overall goals and how the segments align with those goals
- The resources necessary to properly serve the segments
- The need and potential availability of collaborators to assist in reaching the segments
- The likely financial returns from serving the segments

Positioning

In conjunction with determining the market segmentation and target market, you should also make a conscious choice about how your company will position itself in the marketplace. Often the determination of the positioning will itself indicate the proper target market.

The positioning statement is a succinct description of how your firm wishes to be viewed by customers. Essentially, it is how you want customers to think of your offering in relation to the competition.



MARKETING MIX (THE FOUR P'S)

The marketing mix comprises the activities of a marketing program. The discrete activities are the tactics a business uses to accomplish its marketing strategy. The marketing mix is commonly broken into four different areas of activity: product, place (channels), promotion, and pricing. The following subsections introduce these concepts briefly.

Product

The product is not simply a tangible object that a business sells, but the entire bundle of benefits offered to the consumer, including any services. This is the total product concept or the integrated product. From a marketing standpoint, the total product concept must be seen through customers' eyes as the total value delivered to customers from purchasing the product.

For example, when purchasing an Apple iPod, a customer is not merely getting the device itself, but also its integration with iTunes, iCloud, and the psychological connection to the Apple brand. This is the bundled value to customers. Viewing the product in such a large framework creates opportunities to differentiate your offering from your competitors.

Place: Marketing Channels

The channels are the ways in which your firm actually delivers its product to the customer. Essentially they are the distribution of the benefits to the market. The places in which your firm will make its product available will be influenced by such considerations as the actual product itself, the target market, and positioning.

For example, if your offering is a consumer product positioned as a commodity, it will need as large a distribution as possible. Conversely, a premium offering will require a limited distribution in select stores to enhance the perception of the product's exclusivity. Additionally, if your customers are businesses, then the channel will need to reach business customers and not retail outlets.

Promotion

Promotion is how your company communicates to customers about the benefits of its offering. It incorporates both personal selling efforts as well as non-personal ones, such as advertising, sales promotion, and public relations. The best

promotional strategies combine personal and non-personal selling to educate customers by informing them of the key features and benefits of the product and close the sale.

Pricing

The combination of the product, place, and channel will largely determine the customers' perception of your offering's value. The perceived value is the maximum price that customers are willing to pay for your product. The difference between the maximum price customers will pay and the actual cost of producing the product is the value that your firm produces. The amount of captured value you seek should be determined by your overall marketing strategy.

Board of Directors

A board of directors' main function is the overall management of a business. While executives are tasked with the day-to-day supervision of the business, the board of directors is responsible for high-level decisions. These can include, but are not limited to, decisions to raise capital and/or sell the company. The board of directors is elected by a company's shareholders and is accountable to the shareholders.

Board of Advisors

Unlike a board of directors, a board of advisors is an informal board. The members of a board of advisors are generally experienced professionals who can assist a start-up with pertinent expertise in the company's market or industry. Additionally, a board of advisors may be able to connect the start-up to sources of funding. The board of advisors may also help to fill in gaps during the start-up's early stages, when resources are not available to hire full-time professionals to fill needed functional roles.

University Resources for Start-Ups

University Resources for Start-ups

The University of Illinois has many resources for start-ups and entrepreneurs. The University's Research Park and the EnterpriseWorks incubators in Chicago and Urbana are key resources that provide physical space, services, and programs specifically designed to help new businesses succeed. Additionally, IllinoisVENTURES is an early-stage venture capital firm and offers guidance, resources, and funding to start-ups. For students, many entrepreneurial workshops, programs, and competitions exist.

PROOF OF CONCEPT FUNDING

Proof of concept funding helps bridge the gap between University research labs and the marketplace by funding development that will demonstrate an innovation's market viability to

potential investors and partners. Proof of concept funding supports activities such as:

- building prototypes
- conducting commercial feasibility tests
- demonstrating the mitigation of risk
- addressing issues identified by industry that improve the ability to license or attract capital from investors

Both the Urbana and Chicago campuses have proof of concept funding programs. To be eligible for funding, projects must be based on an invention that has been disclosed to the Office of Technology Management. Those interested must submit pre-proposal applications to their OTM.

Urbana-Champaign: The Illinois Proof of Concept Fund (I-POC)

The I-POC Fund, managed by the Office of Technology Management, is made possible by contributions from the Office of the Vice Chancellor for Research and colleges and units across campus. I-POC awards range from \$10,000 - \$50,000.

Chicago: Proof of Concept Awards Program

The POC Awards Program is part of the UIC Chancellor's Innovation Fund. It is conducted twice yearly with grants up to \$75,000 for awarded projects.



EnterpriseWorks on the Urbana campus

Incubators

An incubator is a facility designed to accelerate the development of young companies. Incubators are ideal for early-stage businesses because they provide an array of resources including peer support and professional services specifically geared for start-ups.

Advantages common to many incubators:

- A variety of function-specific spaces from offices to lab suites fully outfitted with lab equipment
- Reduced overhead costs through the pooling of equipment and resources
- Shared common areas, which encourage knowledge transfer between tenants
- On-site consulting, training, and support resources to help guide start-ups to success

THE OFFICES OF TECHNOLOGY MANAGEMENT

The Offices of Technology Management are responsible for managing the intellectual property generated by research and educational activities at the University of Illinois.

Their shared mission is to encourage innovation, enhance research, and facilitate economic development through the transfer of intellectual property. They provide responsive professional services to ensure that the results of University research are successfully transferred outside the University, driving economic growth in Illinois and benefiting the general public.

Licenses to use University intellectual property in a start-up company are negotiated with your campus Office of Technology Management.

UNIVERSITY OF ILLINOIS RESEARCH PARK

The University's Research Park, located on the Urbana campus, provides an environment where technology-based businesses can collaborate with the University's faculty and students, as well as have access to University services. It is currently home to the EnterpriseWorks incubator and more than 90 companies, including many Fortune 500 companies.

ENTERPRISEWORKS

EnterpriseWorks is a 43,000 square-foot University-owned start-up incubator located in the Research Park. EnterpriseWorks offers short-term leases for laboratory and office suites. Additionally, it offers programs specifically designed to help start-ups succeed, such as the Entrepreneur-in-Residence (EIR) program and other business support services. Since the incubator opened in 2003, it has become the launching pad for more than 145 start-up companies.

ENTERPRISEWORKS PROGRAMS

Entrepreneur-in-Residence Program (EIR)

The EIR program hires experienced technology entrepreneurs to provide monthly counseling to new start-up ventures and prospective technology entrepreneurs. The program selects peers who have faced similar challenges in commercializing research or early-stage technology and are able to provide advice derived from their own experiences in successfully attracting investors and industrial clients.

The EIRs keep weekly office hours and are **available to any Research Park client or University of Illinois faculty, staff, or student entrepreneur.**

They can advise on issues including:

- business consulting
- strategy assistance
- marketing and communication assistance
- investor preparedness

University of Illinois Research Park



2011 Outstanding Research Park by the Association of University Research Parks



More than **\$575 million** raised in venture capital and angel funding by incubated companies



More than **\$43.5 million** in SBIR and STTR grants awarded to companies in the Park between 2004-2012

Additionally, the EIR program hosts monthly training events featuring topics such as intellectual property basics, business development and sales, SBIR/STTR grant writing, and investor options and negotiations.

To receive consultation from one of the EIRs, applicants should submit an online request form through <http://go.illinois.edu/eirhelp>. Entrepreneurs may select an EIR or have one assigned to them by the EnterpriseWorks staff based on the subject matter and availability of the team.

NSF I-CORPS AT THE UNIVERSITY OF ILLINOIS

NSF I-Corps is a partnership program designed to teach University entrepreneurs how to determine product opportunities from academic research.

The Urbana campus is an I-Corps Site, which is geared for developing potential I-Corps Team projects and providing an entrepreneurial program for potential faculty and graduate student teams to complete together to access their business potential. I-Corps Sites provide infrastructure, advice, resources, networking opportunities, training, and modest funding to enable groups to transition their work into the marketplace or into becoming I-Corps Team applicants.

The goals of the program are to help you:

- validated your market size, value proposition, and customer segment
- be in a position to apply to the National NSF I-Corps program
- pitch to investors if needed
- Apply for SBIR funding

More than 30 teams participated in the program in the first year alone.

I-Start

EnterpriseWorks also offers the **I-Start Entrepreneur Assistance Program**. I-Start is a matching award program offering a suite of first-year professional services. I-Start can help with business development, business formation, SBIR application, marketing, and bookkeeping. Participants also receive referrals to service providers offering rates that match the funding level. The EIRs help to evaluate I-Start clients and monitor their progress.

Affiliate Program

The Affiliate Program is an affordable **pre-incubation program helping early stage start-up companies** access services. The program includes:

- Mailing address and mailbox at EnterpriseWorks
- Access to shared conference rooms
- Access to “hoteling” space for shared office use with a computer, printer, Internet, and MS Office programs
- Access to EIR services

I-Start Entrepreneur Scope of Services

Legal Services	Business Planning	SBIR Assistance	Financial and Payroll Services	Student Shared Services Center
<ul style="list-style-type: none"> • Initial company formation, bylaws, application for FEIN (filling fees paid by entrepreneur) • Stockholder agreements and certificates • Stock option plan • Employment agreement • Non-disclosure agreements 	<ul style="list-style-type: none"> • Write business plan with inventor input • Market research • Financial projections • Recommendation on sources of capital • Assistance with hiring and incorporation decisions 	<ul style="list-style-type: none"> • Finding solicitation and agency fit • SBIR process guidance • Draft budget • Writing assistance • Help with letters of support • Project management • Registrations and submission 	<ul style="list-style-type: none"> • Payroll administration • Quarterly financial statements • Assistance with Quickbooks setup 	<ul style="list-style-type: none"> • Market research • Presentation assistance • Initial template website • Logo assistance • Social media, adwords • IT/Computer system setup (up to 100 hours of student work)

- Invitations to weekly Research Park programming and events
- Research Park website tenant listing
- Allied Agency Status with Illinois

Business Support Services:

- Designer-in-Residence program available to help with product design
- On-site staff providing assistance with operations, information technology, and administrative needs
- Assistance with hiring student employees
- Referrals to funding services and professional service providers
- Hazardous waste disposal and lab safety consultation through the University's Division of Research Safety
- Procurement assistance with the University's stores and facilities at University rates
- Mail and package handling
- On-site lab supply stock room

Events for Entrepreneurs:

- Speakers from the local business and technology communities
- Monthly social events
- TechCocktail and TechMix technology demonstrations
- CU Software User Group
- CU Women in Tech bi-monthly lunch
- Annual career fair
- Summer concert series

ENTERPRISEWORKS CHICAGO

EnterpriseWorks Chicago creates a vibrant entrepreneurial ecosystem that engages the entire University of Illinois at Chicago campus, leverages University of Illinois system-wide assets, connects resources within and beyond the University to support emerging technology companies, and shares economic benefit with the greater Chicago community and the state of Illinois.

EnterpriseWorks Chicago executes this function around five pillars of an entrepreneurial ecosystem.

• Talent

EnterpriseWorks Chicago educates inventors on the business of commercialization and creates entrepreneurial experiences for students to develop broader skills. Providing access to entrepreneurs-in-residence, mentors, industry experts, and functional specialists cultivates new talent and creates an environment that attracts serial entrepreneurs and fills the talent pipeline for emerging technology companies.

Health Technology Innovation (HTI)

EWC's flagship initiative is HTI, convening at the intersection of Health, Technology and Innovation. Anchored in the Chicago Technology Park, HTI is a national best practice in shared wet and dry laboratory facilities.

Centered on collaboration space, a fully equipped meeting and classroom with HD video conferencing systems, smart board technology and more, all aimed at nurturing the unique commercialization path of the life sciences and complex research technologies.

At HTI scientists, engineers, investors and industry experts are working to validate technology, create new products and accelerate new ventures.



- **Innovation**
EnterpriseWorks Chicago serves as a vehicle for innovation, finding commercial potential through company formation and start-up ventures.
- **Infrastructure**
EnterpriseWorks Chicago provides incubation offices and laboratory facilities, implements training and support programming, and offers an operational infrastructure to serve as a hub for a robust entrepreneurial ecosystem.

Chicago Innovation Mentors (CIM)

Chicago Innovation Mentors helps connect University and Chicago-area technology-based start-ups with mentorship teams. Those in partnership with Chicago Innovation Mentors receive commercialization guidance and learn valuable entrepreneurial skills. CIM offers resources in the following areas:

- Intellectual property
- Financing
- Networking in Chicago
- Commercializing technology
- Team management

Both the Urbana and Chicago campuses are members of CIM.

- **Networks**
EnterpriseWorks Chicago creates opportunities for entrepreneurs, students, and inventors to formally and informally connect to a broader community through events, exchange engagements and news of entrepreneurial interest at the city, state, national and global level.
- **Capital**
EnterpriseWorks Chicago cultivates funding sources and builds relationships

within the capital community to improve opportunities and access to capital along the commercialization continuum.

ILLINOISVENTURES

The Board of Trustees of the University of Illinois launched IllinoisVENTURES in 2002.

Under the guidance of a world-class board comprised of leaders from all phases of the investment community as well as academia,

Incubator Leasing Process

Prospective tenants at EnterpriseWorks submit an application and their business plan for review (typically takes one week). Acceptance is contingent upon the following:

- ✓ The applicant must be an incorporated for-profit company with a valid tax ID
- ✓ Must have a research and/or technology orientation
- ✓ Must be an early-stage company
- ✓ Preference for start-ups with a relationship with the University of Illinois
- ✓ The applicant must have a real need for incubation facilities and services
- ✓ Focus on getting a product to market and generating revenue
- ✓ Personal commitment to building a business, not a hobby
- ✓ A high-quality business plan
- ✓ The principals involved should be well-qualified in their field of technology and have (or plan to have) experienced management on the team
- ✓ The company must be financially solvent with a plan to raise sufficient capital to achieve its business plan

All leases at EnterpriseWorks are one year in length and use a standard University template. Leases are cancellable by the tenant with 30 days notice. Rates include utilities, furniture, internet service, and access to shared facilities. Tenant is responsible for having commercial liability insurance and optional phone service.

IllinoisVENTURES has created a state-of-the-art environment for new company formation via a unique public/private partnership that is a valuable resource for those interested in starting up a company.

In 2004 IllinoisVENTURES raised their first venture fund, the Illinois Emerging Technologies Fund, in recognition of the limited presence of seed and early-stage technology investors actively committing capital in Illinois.

To date, IllinoisVENTURES has formed and supported an array of companies in multiple business domains throughout the region, which have attracted substantial third-party co-investment from leading investment firms across the nation.

With offices in Champaign and Chicago, IllinoisVENTURES professionals provide guidance to faculty in early market assessment, competitive analysis, business strategy, and other activities necessary to create high potential, venture-ready businesses. The firm also provides funding through all stages of business creation and development.

RESOURCES FOR STUDENT ENTREPRENEURS

The Technology Entrepreneur Center (TEC) is an interdisciplinary center on the Urbana campus that engages faculty, students, and alumni in the practice of entrepreneurship. Since TEC's creation in 2000, the center has provided skills, resources, and experiences that are essential for successful innovators and entrepreneurs.

TEC offers:

- **Innovation LLC**, created as a partnership between University Housing and TEC, is an entrepreneurial living-learning dorm in the Illinois Street Residence Hall where students are actively involved with and exposed to TEC opportunities.
- **Charm School** provides students with an opportunity to spend a day learning the skills necessary to succeed in a professional environment. Students spend the day perfecting their networking and interviewing skills, as well as learning to dress professionally and build standout resumes.
- **SocialFuse** is a recurring event for students, faculty, and community members who wish to pitch ideas and network with others from various majors and backgrounds. The event features start-up pitching followed by informal networking.

- **Invention to Venture (I2V)** is a program of the National Collegiate Inventors and Innovators Alliance that teaches students technology entrepreneurship basics and network building skills. Several workshops are offered each year.
- **Discarded to Precious (D2P)** is a competition hosted by TEC and the School of Art + Design that challenges students to transform discarded material into something more useful.

About IllinoisVENTURES

- Total assets under management:

\$65 MILLION

- ATTRACTED

\$600 MILLION

3rd-party co-investment in holdings — over 13:1 leverage

- **The Patent Clinic** is a joint effort between TEC and the College of Law in which selected participants from the Cozad New Venture Competition and the Illinois Innovation Prize can compete to have their patent application drafted free of cost.

The Academy for Entrepreneurial Leadership (AEL) has offered entrepreneurship programs, services, and resources to faculty, students, and community members since its creation in 2004. AEL also helps to encourage entrepreneurial awareness and initiatives across all disciplines on the Urbana campus.

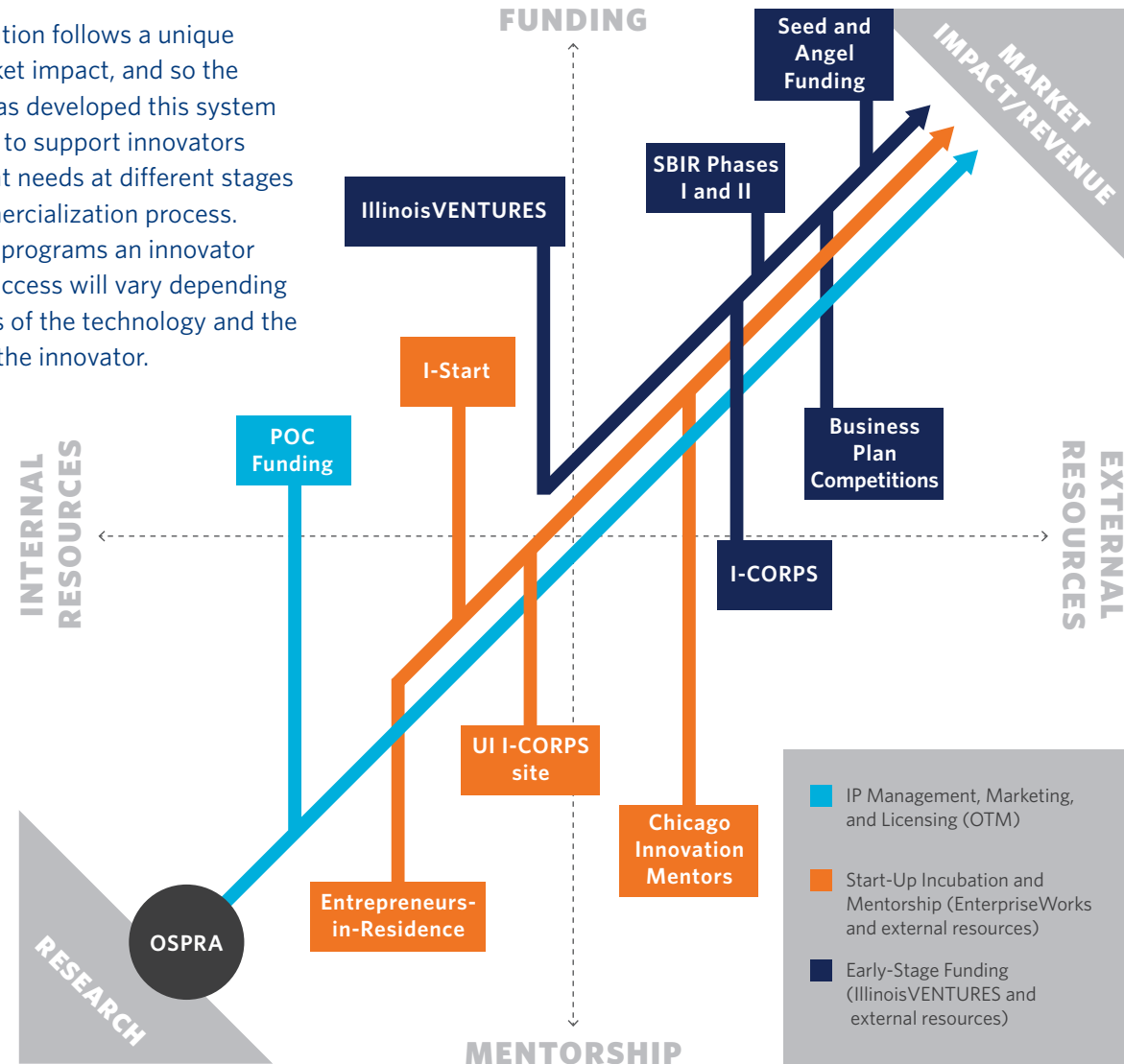
The Student Start-up Initiative by EnterpriseWorks provides student entrepreneurs with free space each semester. This space is assigned based on competitive proposals submitted by students.

Awards and Competitions:

- Cozad New Venture Competition
- Illinois Innovation Prize
- NCIIA Grants

The Start-Up Resource Matrix

Every innovation follows a unique path to market impact, and so the University has developed this system of resources to support innovators with different needs at different stages of the commercialization process. The specific programs an innovator chooses to access will vary depending on the needs of the technology and the intention of the innovator.



Funding Your Business

Types of Funding

Funding can be divided into three categories, each of which has different implications for the investor, investee, and business:

Grants

No obligation to repay provided that the terms of the grant are met.

Debt

Borrowed funds, repayable on a fixed schedule with interest.

Equity

Ownership through either stock or membership; Equity funding can have profound effects on by-laws, voting rights, operational control, and future rights.

Funding Sources

Many start-ups fail due to a lack of resources. Obviously, one of the keys to a start-up's success is securing funding. Small business funding comes from several places, each one having advantages

and disadvantages. This section will briefly discuss different types of funding sources.

SELF-FINANCING

Self-financing is exactly as it sounds: a business funded by the personal savings of the founders. This allows the entrepreneurs to maintain complete control of the business. Additionally, when external funding is sought, investors look for entrepreneurs who have "skin in the game." An entrepreneur who has self-financed a business has already signaled to investors that he or she is serious about moving the business forward.

BOOTSTRAPPING

Bootstrapping is the reinvestment of early product sales into a company. It requires a customer-centric process of development that permits the company to bill for early sales. Bootstrapping allows entrepreneurs to maintain control of a business without having to acquiesce to outside influence, while also preventing the entrepreneurs from risking their own personal savings.

FEDERAL GRANTS

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs offer grants to qualified small businesses. The purpose of these programs is to help fund early-stage R&D at small technology companies, including faculty start-ups. The

University's incubators offer technical assistance and counseling to faculty entrepreneurs who are interested in securing SBIR or STTR grants.

SBIR

SBIR is a highly competitive program that encourages domestic small businesses to engage in research and development that has the potential for commercialization. The stated mission of the SBIR program is to support scientific excellence and technological innovation through investment of Federal research funds in critical American priorities to build a strong national economy. The program's goals are to:

- Stimulate technological innovation
- Meet Federal research and development needs
- Foster and encourage participation in innovation and entrepreneurship by socially and economically disadvantaged persons
- Increase private-sector commercialization of innovations derived from Federal research and development funding

STTR

STTR is another program that expands funding opportunities in the Federal innovation and development arena. Central to the program is the expansion of the public and private sector partnership to include the joint venture opportunities for small businesses and nonprofit research institutions. STTR's most important role is to bridge the gap between performance of

Eligibility for SBIR & STTR Grants

- U.S. business organized for profit
- All research and development must be performed in the U.S.
- Independently operated and at least 51% U.S. owned by individuals
- 500 employees or fewer, including affiliates
- For the **SBIR program**, the principal investigator's primary employment (more than 50% commitment) must be with the small business concern at the time of the award and for the duration of the project period
- For the **STTR program**, the principal investigator can be employed with the small business or the participating non-profit research institution but must have a formal (minimum 10%) commitment with the small business concern. Additionally, the small business concern will conduct not less than 40% of the work and the partnering research institution will not perform less than 30% of the work.

basic science and commercialization of resulting innovations. The stated mission of the program is to support scientific excellence and technological innovation through the investment of Federal research funds in critical American priorities to build a strong national economy. The program's goals are to:

- Stimulate technological innovation
- Foster technology transfer through cooperative R&D between small businesses and research institutions
- Increase private sector commercialization of innovations derived from Federal R&D

LOANS

The two primary options for start-ups to secure debt financing are through either banks or the Small Business Administration (SBA). Banks often want to see two to three years of financials before they consider making a business loan. Obviously, this can pose significant challenges for new start-ups. Additionally, if a bank considers lending to a start-up operation, the loan would be heavily collateralized with the entrepreneur's personal assets. Alternatively, the SBA participates in loans programs that are designed to help start-ups.

BUSINESS PLAN COMPETITIONS

Numerous business plan competitions exist that can help you secure some initial funding. Following

are a few examples of competitions, participation in which could provide resources and assist in refining your business plan and pitch.

Cozad New Venture Competition

This competition awards an estimated \$150,000 in cash and in-kind prizes and is open to all full and part-time undergraduate and graduate students on the Urbana campus.

Illinois Innovation Prize

The Illinois Innovation Prize is awarded annually to the most innovative student on the Urbana campus. Winners are chosen by the Technology Entrepreneur Center and receive prize money.

PROPEL Business Plan Competition

Sponsored by the iBIO IndEx, this competition offers a \$10,000 cash award. To be eligible companies must have their main company offices and staff located in Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Ohio, or Wisconsin. Competitors should be life sciences companies or current or past PROPEL companies. Additionally, companies should be in the pre-revenue stage or have revenue less than \$2 million.

National Collegiate Inventors and Innovators Alliance (NCIIA) Grants

With support from The Lemelson Foundation, the NCIIA awards approximately \$2 million in grants annually to U.S. colleges and universities. There

are several different NCIIA grant programs, but their common goal is to support technological innovation and entrepreneurship with a positive societal impact.

Licensing Executives Society Graduate Student Business Plan Competition

This annual competition with a \$10,000 grand prize focuses on business plans that hinge on ground-breaking technologies and services and also emphasize intellectual property strategies that support business goals.

JOINT VENTURES

Your start-up may benefit from strategic alliances with larger companies. The advantages of entering into joint development agreements include financial support from a corporate partner and/or investor with a long-term perspective, access to industry knowledge and key markets, and potential acceleration of a product's time-to-market. However, these potential advantages often come with some risks that should be carefully considered. These risks include: a potential claim to the IP rights of the start-up; the larger partner demanding exclusive rights to some markets for a period of time; the start-ups dependency on the larger partner's continued support, leading to additional pressure to achieve predetermined milestones; the loss of the start-up's ability to control its destiny; and risk of diluting the financial benefit to the start-up.

Key Terms

Some terms are common to venture capital, and you will inevitably encounter them in the course of securing funding. A few of the most important concepts include:

Risk

The quantifiable likelihood of loss or less-than-expected returns.

Return

The annual return on an investment, expressed as a percentage of the total amount invested.

Common stock

Securities representing equity ownership in a corporation, providing voting rights, and entitling the holder to a share of the company's success through dividends and/or capital appreciation. In the event of liquidation, common shareholders have rights to the company's assets only after debtholders, bondholders, and preferred stockholders have been satisfied.

Preferred stock

Capital stock provides a specific dividend that is paid before any dividends are paid to common stockholders and takes precedence over common stock in the event of liquidation.

Convertible stock

Preferred stock that can be converted into a specified amount of common stock at the holder's option.

Liquidation preference

In venture capital, the right to receive a specific value for the stock if the business is liquidated; more generally, the order in which credits are satisfied in the event of the business liquidating.

Exit strategy

The way in which an investor plans to close out an investment; venture capitalists and angels typically have an IPO or acquisition exit strategy to relinquish their holdings and realize a return on their investment.

ANGELS

Angel investors are typically wealthy individuals who meet the IRS and SEC definitions of an accredited investor. Increasingly, however, angel investors are working in association with other angel investors, often in an organized angel group. Angels look for companies that have great people and great teams. Additionally, companies that have a potential competitive advantage in rapidly growing markets are an attractive investment to angels. Angels typically are involved in the seed stage of funding and often have expertise in the start-up's industry, putting them in a position to offer mentoring assistance.

VENTURE CAPITAL

Venture capital firms are professional, institutional managers of risk capital used to fund ideas that could not be financed with traditional bank financing. Additionally, the funded ideas generally threaten established products or services and require five to eight years to launch. Venture capital firms make an equity investment in the start-up's illiquid stock. Consequently, any return on the investment occurs from the stock's appreciation and eventual liquidity, either in the form of a public offering or private sale.

Venture capital firms provide more than money to start-ups. Once an investment is made, the venture partner will play an active role in the

development and growth of the company, typically taking a board seat. This hands-on approach limits the number of companies in which a venture capital firm will invest.

Although many venture capital firms invest in start-ups founded by entrepreneurs with close ties to the University, it is important to note that the majority of start-ups do not receive venture capital. Of the 100 business plans that a venture capital firm will receive, typically only 10 get a close look and extensive due diligence. Of those 10, generally only one will receive funding.

When considering whether to invest in a company, a venture capital firm will consider the management team, the concept, the marketplace and market growth potential, the fit with the venture capital fund's objectives, the value-added potential for the firm, the necessary capital to grow the business, and, perhaps most importantly, a clear exit strategy.

Securing Funds

When approaching investors, you should consider not only the types of funding to seek, but also how your start-up's business plan and management team will affect investors' determination of whether to invest in the company or not.



Dilution

When a start-up issues new shares of stock, an entrepreneur must keep the effects of dilution in mind. Dilution is when the issuance of new shares of stock decreases the proportional ownership of existing stockholders.

Every round of equity funding results in dilution.

For example, if a company initially issues ten shares of stock equally to ten individuals, then each shareholder will hold 10% of the company. If the company then issues an additional ten shares to a single investor, the total shares outstanding is 20, and the original ten shareholders will each own 5% of the company. The single investor holding the newly issued shares will own 50% of the company.

THE BUSINESS PLAN

Although the creation of a business plan is discussed more extensively in a previous section, it is important to note and reiterate aspects of the business plan to which investors will give particular consideration.

The pitch and executive summary are the most important tools you have to gain the initial interest of an investor. The focus should be on the problem and the solution that the start-up will provide. Specifically, the “job” that a potential customer needs to accomplish and how your company’s offering will do that “job” better, more efficiently, and/or cheaper than existing alternatives. The pitch and executive summary should focus on the practical benefits of the offering and not the technical features. Because the focus is on the practical benefits, the pitch and executive summary should avoid technical jargon. The pitch needs to be straightforward and honest. Additionally, weaknesses should be acknowledged and addressed in detail. The pitch and the executive summary should be concise.

Further, the business plan should demonstrate a clear vision and strategic outlook. Investors will want to see that the business plan reflects your comprehensive understanding of the market. Additionally, investors are alert to certain red flags indicating that an entrepreneur has unrealistically or not adequately evaluated the market and the strength of the start-up’s proposed offering. These include:

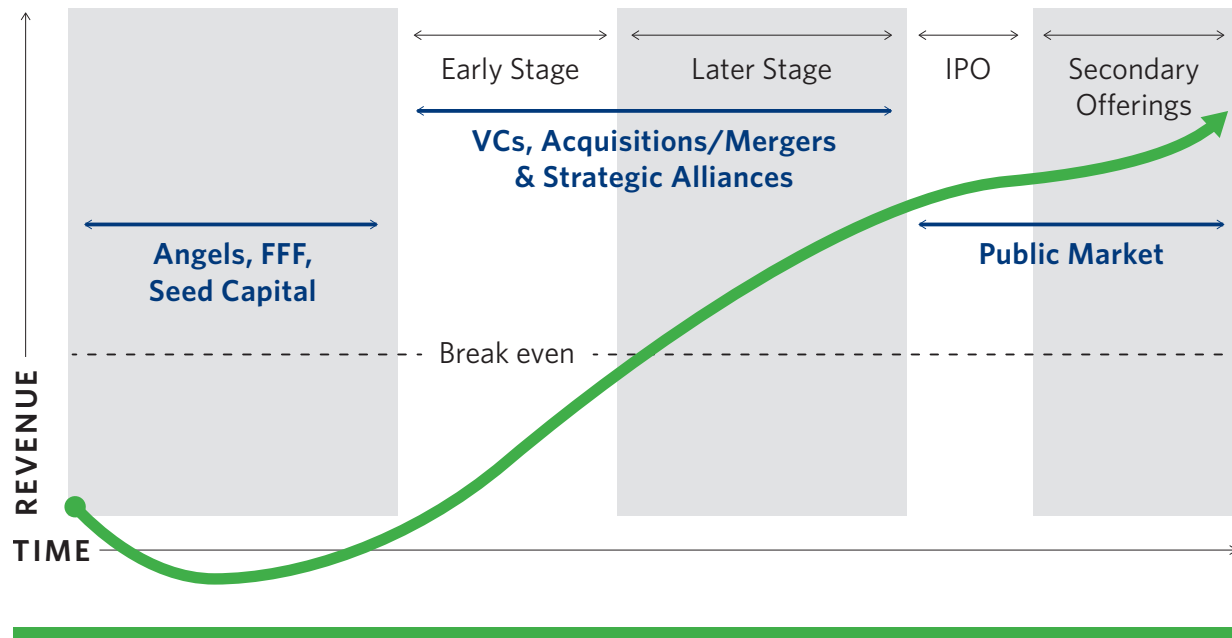
- A failure to recognize that a product itself does not constitute a business
- Claims that a product will sell itself
- Unrealistic belief that the product will have no competition

THE BUSINESS TEAM

Investors will carefully evaluate not only your business plan and offering, but the business

team as well. For this reason, when you are pitching to investors, remember that you are selling yourself and the management team, not only the innovation. If an investor doesn’t believe that your team can execute, then the strength of the start-up’s technology or offering simply will not matter. When seeking funding, you must demonstrate that your management team has the knowledge, ability, and drive to succeed.

The Different Stages of Funding



Your management team should demonstrate that it has management experience and a product prototype. Additionally, investors want to know that the business model has been validated, specifically that the product not only will work but that the price, sales channels, and marketing will actually lead to, or has led to, profitability. Again, the management teams clear understanding of the market opportunity and of the competitive environment are critical to investors.

THE INVESTOR

When approaching investors, be mindful that they are concerned with the return on their investment above all else. All investors want five key questions answered:

- How much will it cost me?
- What do I get?
- How will you spend my money?
- What is my expected return?
- When will I get my return?

The ideal investor will offer a start-up more than just funding. The right investor will also lend his or her experience to the business, mentoring and partnering with the management team. Additionally, the right investor will be able to support the business in future rounds of funding through a strong network of contacts, both in the start-up's industry and within the investment community.



Human Resources

There are many regulations that must be followed when deciding to hire an employee, and at first, it can seem overwhelming. Fortunately, there are many resources available to assist small business owners with compliance. This section provides a basic overview of legal requirements you should be familiar with before hiring employees. It begins with standard labor and employment laws and ends with non-disclosure and non-compete agreements. More detailed information can be found on each of these topics through the Small Business Association and the Department of Labor.

Standard Labor and Employment Laws

FAIR LABOR STANDARDS ACT (FLSA)

The FLSA is designed to enforce fair labor practices and includes regulations concerning minimum wage, overtime eligibility, and proper recordkeeping practices for exempt and non-exempt employees. Two types of coverage exist: enterprise and individual. Enterprises with at least two employees or that conduct at least \$500,000 a year in business are covered by the FLSA.

WORKERS' COMPENSATION

Businesses are required by law to provide workers' compensation for all employees. Workers' compensation provides coverage to employees in the event of accidental death or serious injury during the course of employment. This coverage is normally purchased through private insurers. The Illinois Worker's Compensation Commission (IWCC) provides many resources to employers seeking to purchase a worker's compensation policy. Contact information for the IWCC can be found in the Resources section.

UNEMPLOYMENT INSURANCE

Unemployment insurance contributions are collected both at the Federal level through the Federal Unemployment Tax Act (FUTA) (IRS Form 940) and at the state level. Businesses are required to contribute if they have employed one or more workers in each of twenty weeks in a calendar year or have paid at least \$1,500 in total wages during a calendar quarter.

New employers should register online with Illinois TaxNet to receive the appropriate information about filing for unemployment insurance. Illinois TaxNet provides new employers with a packet that contains information on applicable tax rates for small businesses as well as resources to guide small businesses through the filing process.

EQUAL EMPLOYMENT OPPORTUNITY

The Equal Employment Opportunity (EEO) Act protects employees from discrimination by employers on the basis of race, gender, age, and disability. A business is subject to the EEO if it has 15 or more employees that have worked for at least 20 weeks. Additionally, the EEO Act requires that posters be displayed in the workplace to inform employees of their rights under the law.

TAX WITHHOLDING

Taxes must be withheld from employee wages at both the Federal level (Federal Insurance Contributions Act-FICA and FUTA) and the state level. In order to complete the necessary forms, businesses will need a Federal Employer Identification Number (FEIN). The following provides a basic breakdown of the primary forms needed for state, as well as Federal tax withholdings.

State

The Illinois Department of Revenue stipulates that businesses are required to withhold taxes. To calculate withholding rates, the Department of Revenue provides a guide with tax tables, IL 700-T, which can be found on the Illinois Department of Revenue website. Employees are required to complete an IL-W-4 declaring their number of allowances. Additionally, all Illinois businesses paying wages or salaries that are subject to withholding are required to file an IL-941 on either a quarterly or annual basis.

Federal

The Internal Revenue Service stipulates that businesses are required to withhold taxes for all employees. Employers and employees are required to file several forms to comply with this regulation. Several of the standard forms are outlined in the table below.

At the end of the year the employer is required to provide the employee with a copy of the W-2 in addition to a 1099. The IRS provides copies of all of these forms as well as numerous resources about filing information and due dates for small businesses.

Form	Filer	Filed with	Content
W-2	Employer	IRS	Details wages of employee; submitted yearly
W-4	Employee	Employer	Number of allowances employee wants withheld
IRS Form 940	Employer	IRS	Annual tax return that covers Federal unemployment taxes
IRS Form 941	Employer	IRS	Quarterly Income Tax Return

Employment Eligibility and New Hire Requirements

All new employees are required to file an I-9 verifying work authorization. Additionally, all businesses are required to register new hires with the Illinois Department of Employment Security (IDES) within the first 20 days of employment. Furthermore, the Federal government requires that posters be displayed in the workplace informing employees of safety procedures, work rights, discrimination policies, etc. In EnterpriseWorks, these posters are displayed in shared areas, so as to cover all of the businesses housed in the facility.

Non-Disclosure and Non-Compete Agreements, Conflict Acknowledgements

While there is no legal requirement that employees sign a non-disclosure agreement or non-compete agreement, it is strongly recommended that all businesses require new hires to sign such agreements to protect proprietary information. Likewise, conflict acknowledgement agreements are important, especially in a university setting. These agreements should be drafted by a legal professional.

Payroll, Taxes, and Direct Deposit

Consider hiring a CPA or using professional accounting software to set up a payroll system before hiring. This will ensure that employee tax withholdings are properly accounted for and will also allow easy documentation of issues related to direct deposit.

Online Resources

CHICAGO

Chancellor's Innovation Fund cif.uic.edu

Innovate@UIC innovate.uic.edu

Office of the Vice Chancellor for Research
tigger.uic.edu/depts/ovcr/research

URBANA-CHAMPAIGN

Academy for Entrepreneurial Leadership
business.illinois.edu/ael

Entrepreneurship at Illinois
entrepreneurship.illinois.edu

Illinois Proof of Concept Fund (I-POC)
otm.illinois.edu/IPOC

Office of the Vice Chancellor for Research
research.illinois.edu

Research Park Resources for Entrepreneurs
researchpark.illinois.edu/resources

Technology Entrepreneur Center (includes the Cozad Competition and Illinois Innovation Prize) tec.illinois.edu

Urbana-Champaign Angel Network
champaigncountyedc.org/business-services/small-business-services/angel-investing

GENERAL

Competitions & Forums

Biz Plan Competitions
bizplancompetitions.com

Clean Energy Challenge cleanenergytrust.org

Invest Midwest investmidwestforum.com

Licensing Executives Society Graduate Student Business Plan Competition
lesfoundation.org/competition/index.html

National Collegiate Inventors and Innovators Alliance Grants (NCIIA) nciia.org/grants

Equal Employment Opportunity eeoc.gov

Fair Labor Standards Act dol.gov/whd/flsa

I-9 uscis.gov/files/form/i-9.pdf

Illinois Department of Employment Security (including new hire reporting) ides.state.il.us

Illinois Workers' Compensation Commission
iwcc.il.gov

Mentors, Angels & Venture Capital Networks

Chicago Innovation Mentors
chicagoinnovationmentors.org

iBio PROPEL ibiopropel.org

Illinois Venture Capital Association
illinoisvc.org

Mid-America Healthcare Investors Network
mhinonline.com

The Midwestern Research University Network
mrun.us

SBIR and STTR grants

SBIR & STTR: sbir.gov

SBIR: zyn.com/sbir

U.S. Small Business Administration sba.gov/

U.S. Securities & Exchange Commission sec.gov

Withholding Information

State (Illinois TaxNet) taxnet.ides.state.il.us

State (Illinois Revenue) revenue.state.il.us

Federal irs.gov

Contacts

CHICAGO

Office of Technology Management

University of Illinois at Chicago
1853 West Polk St. Suite, 446 Chicago, IL 60612
312.996.7018 ▪ otm@uic.edu
otm.uic.edu

IllinoisVentures

University of Illinois at Chicago
2242 W. Harrison St, Ste 201, Chicago, IL 60612
312.251.0700
illinoisventures.com

EnterpriseWorks Chicago

University of Illinois at Chicago
2201 West Campbell Drive, Chicago, IL 60612
ewchicago@uillinois.edu
enterpriseworkschicago.com

URBANA-CHAMPAIGN

Office of Technology Management

University of Illinois at Urbana-Champaign
Ceramics Building Suite 319
105 S. Goodwin Ave., Urbana, IL 61801
217.333.7862 ▪ otm@illinois.edu
otm.illinois.edu

IllinoisVentures

University of Illinois at Urbana-Champaign
60 Hazelwood Drive, Ste 212, Champaign, IL 61820
217.239.1950
illinoisventures.com

Research Park and EnterpriseWorks

University of Illinois at Urbana-Champaign
60 Hazelwood Drive Champaign, IL 61820
217.333.8324 ▪ researchpark@illinois.edu
researchpark.illinois.edu

UNIVERSITY ADMINISTRATION

Office of the Vice President for Research

University of Illinois
346 Henry Administration Building
506 S. Wright St. Urbana, IL 61801
217.265.5440 ▪ vpr@uillinois.edu
research.uillinois.edu