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NUtech Ventures Guide to Start-up Companies at the University of Nebraska-Lincoln

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GUIDE TO STARTUP COMPANIES

at the University of Nebraska–Lincoln



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Acknowledgment: This Guide is adapted in part, with permission, from the University of Illinois's Start-Up Handbook and Stanford University's Startup Handbook.

Overview

NUtech Ventures is the commercialization affiliate of the University of Nebraska, serving the Lincoln and Kearney campuses. We protect and license the university's intellectual property and promote entrepreneurship through programming and sponsored events. Ultimately, our mission is to improve quality of life and promote economic development.

NUtech Ventures has created this guide to help aspiring University of Nebraska entrepreneurs in starting their entrepreneurial journey. It is focused on companies formed to commercialize innovations developed at the University of Nebraska–Lincoln and protected via intellectual property rights owned by UNL and assigned to NUtech Ventures.

University of Nebraska entrepreneurs have started several companies in the last decade based on licenses to UNL innovations. We are proud of all our UNL startups; some examples include: Virtual Incision, Neurocarrus, Epicrop, Synbiotic Health, GC Image, Turfgrade, Airlift Environmental, and Drone Amplified.

If you're contemplating forming a startup, you probably have many questions. NUtech Ventures prepared this guide to help you navigate the entrepreneurship ecosystem at UNL, the city of Lincoln, and the broader state of Nebraska and region. We hope you will use it as a starting point in your startup journey.

Making the Decision to Form a Startup

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

Business considerations concern the marketplace for the startup's envisioned products, as well as the potential performance of the products in that market.

Business considerations include:

- The product(s) or service(s) the startup will offer.
- Technology innovation and intellectual property position.
- Whether the product or service satisfies a need that people value.
- How is this need being met today? What is the competition?
- The price a customer would pay for the product or service.
- The size of the market and effect on startup profitability.
- The scope of the regulatory landscape, if any.
- How far along is the technology? How much time and money will be required to bring a product to market?
- Development costs versus investment returns.

Identifying the market need can be a challenge if your expertise is in research and development, rather than product marketing and sales. If your startup's technology solves an actual problem or delivers an unmet need at a competitive price, then the startup is more likely to succeed. It is important to understand the market in which the products resulting from your technologies will compete. Knowledge of a market can be acquired through professional market research, government data, trade publications, and interviewing prospective customers and stakeholders. The decision to form a startup should be made only after acquiring a thorough understanding of the market and how your product or service would fit into that market.

Personal considerations include your ability to commit to the process and the willingness to start a business. Personal considerations include:

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

Starting a business usually 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 may lead to wealth creation, it often comes at significant risk. Unfortunately, unforeseen challenges typically arise when starting a business, and the reality is that many startups fail. It helps if you can adapt quickly to changing conditions and remain committed to the endeavor or recognize when to stop.

Validating the 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 solves a problem which customers will pay for. 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 the process is iterative, you may return to any or all of the steps over time, refining and repeating the processes involved.

1

Customer Discovery

Identify 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.

NUtech Ventures and its partners offer the Nebraska-Introduction to Customer Discovery program, with typically two cohorts per year. It is modeled after the National Science Foundation's Innovation Corps (I-Corps) program, in which researchers interview stakeholders to understand their needs and use that feedback to guide decisions about a startup company or technology commercialization.

Steps to Startup Launch

Do You Have an Idea for a Startup?

Get in Touch with NUtech Ventures

- [Disclose the technology or innovation.](#)
- Work with NUtech to protect the intellectual property.
- Enter into a Stand-still Agreement.

Develop Your Business Model

- Network and seek input.
- Engage in customer discovery.
- Consider using the business model canvas to inform your business model.

Clear Conflicts of Interest

- Contact (402) 472-6907 and/or UNLCOI@unl.edu.

Form Your Company

- Incorporating is a simple process, but there are numerous details that should be addressed to position your company for long term success.

Negotiate Definitive License with NUtech Ventures

- Work with NUtech Ventures to license the IP to your company.

Pursue Funding

- Review relevant resources at the end of this guide.

Intellectual Property and Your Startup Company

For many university startups, intellectual property is the business's first and key asset, and will give the startup its potential 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 [NUtech Ventures Handbook for Inventors and Innovators](#).

Ownership of University-Owned Intellectual Property

Organizations almost always own the intellectual property developed by their employees. The Board of Regents of the University of Nebraska owns University of Nebraska inventions and innovations/creations (please see our BOR policy on page 21). If an innovator engages in "substantial use of university resources" in conceiving of the innovation, then they have an obligation to disclose and assign that innovation to the university. That means, if the innovation is conceived as part of their employment, or if it is conceived outside of the scope of employment but the innovator uses university equipment or lab space, then the university has an ownership stake.

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 of 20 years. This monopoly is intended to prevent others from exploiting the invention, as defined by the patent claims, 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 contribute to growth in the field.

Inventorship

Inventorship is defined by U.S. patent law. 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 criterion for inventorship is different than for academic authorship. Inventorship is a legal definition that has been refined through statutes and case law. Inventorship flows from invention conception, 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. If a person only works at the direction of others to perform experiments and doesn't conceive of some part of the invention, then that person is not an inventor.

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. 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 Regents of the University of Nebraska. 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.

How to Protect Your Intellectual Property

Intellectual Property (IP)

IP encompasses creations of the mind, including patents, plant variety protection (PVP) certificates, copyrights, trademarks, and trade secrets. NUtech will determine the appropriate protection type through its screening and evaluation process.

NUtech Ventures serves the UNL innovation ecosystem by identifying, evaluating, protecting, marketing, and licensing the university's intellectual property. Submitting a disclosure form is the first step in assessing market potential and options for intellectual property protection. For any questions about the process, or for help filling out the disclosure form, please contact one of our [technology managers](#).

What to Include in Your Invention Disclosure

- A written description of what makes your innovation unique and exactly how it works, what applications it might have, and how it is different from existing innovations in the field.
- Information about funding sources and public disclosures, to determine if we have the ability to protect the invention.
- Information about all the inventors/creators/authors, including each person's contribution.

Intellectual property may include, but is not limited to:



Biological materials



Germplasm



Chemicals



Machines



Books



Software



Photographs



Videos

The invention disclosure will include:

- 1 The category of the innovation and a detailed summary describing it**
 - Is it a compound, process, machine, manufacture or composition, a new use for, or an improvement of, a known item, software, mobile application, process, or other?
- 2 The benefit or use of the innovation, including:**
 - The problem it solves.
 - Advantages it has over existing solutions (cost, convenience, safety, performance).
- 3 Any pending public disclosures, including:**
 - Any publications, presentations, or manuscripts where the invention is described.
- 4 A list of other research collaborators and funding sources including:**
 - Collaboration with other scientists within the university and outside of the university.
 - A list of all research projects funded by an agency, foundation, or another source specific to the invention.
 - Materials obtained under a material transfer agreement.
- 5 Faculty interest in a startup opportunity.**

When to Submit an Invention Disclosure to NUtech Ventures

A disclosure form is confidential and used for internal assessment; it is not a patent application. Complete a disclosure form if:

You plan to publish or present your research. Once you publish or present — known as a public disclosure — foreign patent rights may be forfeited. Also, after a public disclosure, there is a one-year deadline to file a U.S. patent application. Once that deadline passes, no U.S. protection is available.

Your research has resulted in a new solution to a problem or has potential market applications. Our team will help further assess the market size, commercialization readiness and intellectual property.

Your federally-funded or privately-funded research may have resulted in intellectual property. Funding sources often require disclosing research that may have intellectual property, such as a new solution to a problem. Our office is responsible for reporting your disclosed research to the funding agency.

You want to start a company based on your research. Learn more about university and community [startup resources](#).

To complete the disclosure process, visit: www.nutechventures.org/disclosures/. UNL researchers can use an online platform to disclose. Alternately, documents are available to download and email.

After a disclosure is received, NUtech Ventures will screen the technology within eight weeks for potential prior art and commercial market. If the technology meets both of these criteria and a decision is made to seek IP

Developing the Business Plan

Entrepreneurs should develop a thoughtful business case to understand the market potential, competition, and funding needs. This should include a plan for developing the technology and attaining sufficient revenue to sustain and grow the company. This plan will be essential when meeting with investors and pursuing funding.

A business plan should be clear and concise. It will be easier to “sell” the vision to investors and attract management talent with a formal business plan. Investors are interested in investing in startups with high growth potential. The business plan should address what investors want to know: the compelling concept, competitive advantage (including patent/IP position), market and financial potential, and proven management team. The business plan is generally a confidential document and should be carefully distributed.

Components of a typical business plan include:

- Executive Summary
- Business Description
- Market Analysis
- Marketing Plan
- Management Team
- Financials

The remainder of this section will look at some of the most important parts of a business plan. It is not a comprehensive guide, but it serves as 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 to reach a milestone or create a prototype or product?

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's 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 startup's products, technologies, or services address those needs.
- The specific companies or customers the startup will serve.
- The company's competitive advantages, such as personnel, technology, or value creation.
- The company's patent and IP landscape.

Market Analysis

The market analysis presents market research showing the current state of your startup'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 compelling 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 startup will target. Further, the market analysis must honestly address the competitive environment. Unfortunately, there are few, if any, profitable markets that are 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. For the marketing 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 startup'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 startup 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, which 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

- Focus on the customer and the market need, NOT on the technology.
- Acknowledge your competition honestly.
- Ask for ongoing feedback from an experienced entrepreneur.
- Discuss current finances and any projections.
- Make sure the plan flows narratively from section to section.
- Keep the business plan as succinct as possible.

Business Model Generation and Value Proposition Tools

There are different tools that you should consider for business planning. Books by Alexander Osterwalder and colleagues, [Business Model Generation](#), [Value Proposition Design](#) and [Testing Business Ideas](#) are useful to outline the key customers, challenges and value proposition your startup company will seek to address — namely, how you will develop and operate your business to solve a problem that the world cares about and will pay to have solved.

Potential Pitfalls

New company formation usually is a high-risk proposition. While many startups are successful, most are not. Some common problems that can cause academic startups to fail include:

Technology does not meet commercial need. Sometimes the science is innovative and exciting but does not correlate to a critical commercial need, or current solutions are still better or are a more cost-effective alternative to the new technology.

Inexperienced management. A strong, experienced, cohesive team is required for a successful startup company. Problems can arise if founders or other members of the team do not have enough startup and business experience or if founders, new management, and/or investors do not have the same strategic vision.

Lack of funding. A startup needs sufficient capital to overcome technical challenges, reach critical business milestones, and progress to the next phase of product development. To attract investors in the company, in addition to great technology, the startup must have a solid business plan and a strong management team.

Timing. Even when a commercial need exists, the startup may miss the market. Sometimes, this is because the market is not ready for a product, e.g., too early, too expensive, lack of need. Sometimes, it is because the product is too late to the market and the need has already been filled by a different technology or competitors have leapfrogged the company with a better product.

Marginal niche. If the target market is smaller than expected, the company may not meet its financial targets.

Unanticipated external factors. Sometimes events outside of the entrepreneur's control can negatively impact a company. But even failure, as long as important experiences and learning were extracted during the process, is often seen as one of an entrepreneur's greatest strengths.

Licensing the Technology

A license to UNL intellectual property is a contract between NUtech Ventures and a company. The contract grants certain university technology rights to a company, in return for payment and a commitment to develop the technology. Most startups seek an exclusive license, because it is typically required to raise funding.

If you would like to license university technologies for use in your startup, you will be asked to demonstrate commitment by providing a written technology and business development plan, or business model canvas. 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. Further, if the founders have participated in a customer discovery cohort, the results of the team's findings are valuable information to convey to future investors and partners.

Standstill or option agreements are often used to reserve rights in an invention while founders evaluate the technology, explore the market and funding opportunities, or raise the capital needed to fully license the rights in question. Option agreements may include financial consideration to NUtech Ventures in order to reserve those rights. Startup companies usually prefer this route and NUtech Ventures may grant standstill or option agreements for three to six months in duration, but no more than one year. After that point, the license negotiation typically begins.

License Negotiations

The licensing process starts 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 robust commercialization plan.

Upfront License Fee/Consideration

An initial fee based on the scope of license rights and the university's investment in the intellectual property may be negotiated. Alternatively, in lieu of an initial license fee, the parties may agree upon an equity stake to the university or possibly, a success or exit fee. The contractual language regarding equity generally includes a non-dilution provision based on an agreed upon level of startup company funding.

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 net sales or a fee per selling unit. Royalty rates vary according to the industry and the contribution of the invention to the product or service. Royalty payments may be structured in different ways, such as one-time or recurring fees.

Sublicensing

Exclusive licenses usually allow the right to sublicense, or authorize others to make, use, and sell the university's technology to facilitate widespread use. Royalties and other 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, NUtech Ventures will delay the reimbursement obligation for U.S. patent(s) expense; however, reimbursement of any international filings directed by the company will be due when incurred.

Performance 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 an exclusive license. Milestones are usually industry specific.

License Compliance

After you license UNL technology, NUtech Ventures will manage the license to ensure all terms and conditions are adhered to, so that 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.

Patent Ownership & Future Intellectual Property Ownership

NUtech Ventures does not assign or transfer IP rights. When appropriate, NUtech can grant an exclusive license after marketing and deciding that the startup is the best candidate to commercialize the invention.

Typically, NUtech Ventures will have filed the initial patent application that is exclusively licensed; the exclusive licensee provides input for the prosecution of this original patent. Follow-on inventions conceived by the licensee, without the university's involvement, usually belong to the licensee. Follow-on inventions based on work at UNL will be owned by NUtech Ventures and the licensing of the new invention will be handled by NUtech as if it were a new disclosure. In other words, the existing licensee will not be automatically granted a license to the follow-on invention.

Joint Inventions

If there are other institutions that contributed to the patented invention (i.e., in a collaboration with faculty from another university), NUtech will enter into an Inter-Institutional Agreement whereby one of the institutions will take the lead. This way a company can negotiate a single agreement with an exclusive license to IP rights owned by both parties.

Licenses for Technology Owned by Other Institutions

Under most circumstances, the startup will need to negotiate separately with the other institution for a license to technology owned by another institution. However, sometimes universities work together to package their technologies together in a single license agreement. For most technologies, it is usually advisable for the company to have a freedom to operate (FTO) analysis conducted on its behalf. The objective is to confirm that the company has a path to acquire all the necessary IP components the startup will need to make its proposed products.

Research License to UNL

UNL and NUtech Ventures always reserve the right to practice their own inventions for research purposes under licenses they grant. However, researchers are not permitted to continue to develop technology at UNL for the benefit of a startup in which the researcher has a financial interest. Please refer to the Conflict of Interest discussion below.

Funding Your Startup

Commercializing technology is typically a capital-intensive process, with the possible exception of some software companies. Entrepreneurs need to present their opportunity to investors or firms for funding their operations and growth. Many startups require financial resources to fund the development, operations and growth of the company. One of the keys to a startup's success is securing such funding. Startup funding may come from several sources, each type having particular advantages. 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. This type of funding may also include friends and family who provide additional resources early in the life of a startup.

Bootstrapping

Bootstrapping can include 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 pursue outside funding and influence, while also preventing 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 research and development at small technology companies, including university startups.

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 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 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 startups to secure debt financing are either through 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 startups. Additionally, if a bank considers lending to a startup operation, the loan would be heavily collateralized with the entrepreneur's personal assets. Alternatively, the SBA participates in loan programs that are designed to help startups.

Joint Ventures

Your startup may benefit from strategic alliances with larger companies. The advantages of entering into joint development agreements include financial support from a corporate partner 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 startup; the larger partner demanding exclusive rights to some markets for a period of time; the startup's dependency on the larger partner's continued support, leading to additional pressure to achieve predetermined milestones; the loss of the startup's ability to control its destiny; and risk of diluting the financial benefit to the startup.

University of Nebraska IP Policy

Angel Investors

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 teams and a potential competitive advantage in rapidly growing markets. Angels typically are involved in the seed stage of funding and often have expertise in the startup's industry, putting them in a position to offer mentoring assistance.

Venture Capital (VC)

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 startup'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 startups. 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.

How Investors Evaluate a Company

Investors listen to pitches constantly, and only a small portion of startups get funding. The investors will determine if the startup meets their strategic and financial goals and if the company fits into their current portfolio of investments. VC funds target at least an overall 20% annual return on the fund, which is significantly higher than other investment vehicles such as stocks and bonds. Investors typically perform due diligence before funding new opportunities.

Dilution

When a startup 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.

Exit Strategy

Investors plan to recoup their investments via exit strategies. Typically, a VC hopes to sell its equity in a portfolio company within 3-7 years, ideally through an initial public offering (IPO). Another exit strategy could be through a merger and acquisition (M&A), instead of an IPO.

The [University of Nebraska Board of Regents Bylaw and Policies](#) on intellectual property is written to encourage innovative research at the University of Nebraska that has commercial impact. As employees of the university, faculty, staff and students are obligated to disclose and assign inventions or discoveries to the university as part of their employment contract. In exchange for this assignment of IP rights, the university spends time and resources in the commercialization of the IP, including providing funds for IP protection, and shares any revenue derived from the IP with the inventors and creators directly. Bylaw and Policies governing intellectual property include:

1

Board of Regents (BOR) Bylaw 3.10

Establishes university ownership of inventions. When the Board of Regents established policy 3.10, the intent was to encourage the commercialization of inventions and discoveries arising from research activities of the university, and when appropriate, the pursuit of patents or other IP protection.

2

Board of Regents Policy 4.4.1

Establishes the copyright policies for the various copyright works and development scenarios that can occur on campus.

3

Board of Regents Policy 4.4.2

The patent and technology transfer policy governs invention disclosure, IP protection, and licensing. This policy outlines the steps that the university can take to protect its IP and how you, the innovator, can also benefit.

Managing Conflicts of Interest

The UNL Conflict of Interest (COI) policy was developed to protect our researchers and our university. Annual COI reporting is completed by submitting an Interest and Outside Activity Reporting Form (IOARF) via [NUgrant](#). By encouraging full disclosure, the university can manage any perceived or actual conflicts before they become a concern.

Per the UNL COI policy, "the creation of a new startup company" constitutes a change that must be reported within 30 days. Startup companies must be disclosed because they meet the following criteria for review:

- Financial Interest: any ownership/equity interest must be reported, regardless of amount.
- Outside Activities: any activities that are completed outside of your UNL responsibilities, but have the possibility of overlapping or conflicting with them, must be reported.

UNL personnel interested in forming startups should consult the UNL COI policy and contact the conflict of interest coordinator at (402) 472-6907 or UNLCOI@unl.edu.

Startup Ecosystem Resources

Startup Resources at UNL

»» Center for Entrepreneurship, UNL College of Business

HLH 315
730 N. 14th Street
Lincoln, NE 68588
<https://business.unl.edu/outreach/center-for-entrepreneurship/>
(402) 472-6273

The Center for Entrepreneurship offers mentorships, workshops, competition and funding opportunities to help you grow, whether all you have is an idea or your business is well underway. With the resources, faculty and collaboration available at Nebraska, you will collaborate, innovate, research and contribute to successful ventures on day one.

»» Nebraska Innovation Campus

2021 Transformation Drive
Lincoln, NE 68508
<https://innovate.unl.edu/>
innovate@unl.edu
(402) 472-5535

Nebraska Innovation Campus (NIC) is connecting the talents of experts, companies and the university to create a unique culture of innovation. NIC is a campus designed to facilitate new and in-depth partnerships between the University of Nebraska and private sector businesses. NIC is adjacent to the University of Nebraska–Lincoln and strategically provides access to research faculty, facilities and students. NIC aspires to be the most sustainable research and technology campus in the United States.

»» NIC Biotech Connector

Nebraska Innovation Campus
1901 N 21st Street
Lincoln, NE 68508
<https://biotechconnector.com/>
(402) 480-5837

The Biotech Connector has 7,700 square feet of well-equipped wet lab space located on Nebraska Innovation Campus. It provides incubation space and services to bioscience startups and high-growth biotech and research-based businesses. The Biotech Connector solves the problem of lack of wet lab space to develop biotech proof-of-concept prototypes in Nebraska.

»» Nebraska Innovation Studio

2021 Transformation Drive
Suite 1500
Entrance B
Lincoln, NE 68508
<https://innovationstudio.unl.edu/>
(402) 472-5510

Nebraska Innovation Studio is a makerspace where creators of all sorts can share ideas, tools and knowledge. It features collaborative workspace and areas for woodworking, fine arts, and rapid prototyping and electronics. University faculty, students, staff and community members are welcome to join the studio for a monthly fee. Members can take part in workshops, be trained on available machines and ultimately, make things here.

»» Weibling Entrepreneurship Clinic, University of Nebraska College of Law

Schmid Clinic Building
P.O. Box 830902
Lincoln, NE 68583-0902
<https://law.unl.edu/eclinic/>
eclinic@unl.edu
(402) 472-1680

The Weibling Entrepreneurship Clinic (E-Clinic) at the University of Nebraska College of Law provides free advice and legal representation to startup business clients throughout the State of Nebraska. The E-Clinic handles a variety of early-stage legal matters, including entity formation, contract drafting and review, intellectual property protection, regulatory, compliance and other transactional legal matters. Law students provide these legal services under direct supervision of Professor Brett Stohs. The mission of the Weibling Entrepreneurship Clinic is to:

- Offer early stage transactional legal advice and representation to Nebraska’s aspiring entry-level entrepreneurs, innovators, and startup businesses;
- Inspire an entrepreneurial spirit among law students by facilitating educational and professional opportunities that connect law students with entrepreneurs and business leaders, relevant partner organizations, and legal practitioners who represent entrepreneurs and startup businesses;
- Contribute to the University of Nebraska’s mission as the state’s primary intellectual center by performing direct outreach to rural and urban communities on legal issues facing entrepreneurs and startup businesses and providing legal support to other University of Nebraska initiatives relating to entrepreneurship; and
- Be a meaningful contributor in the Nebraska ecosystem of entrepreneurs and supporting organizations that are working to make the state of Nebraska one of the best places in the United States to start a business.

Additional Startup Resources

»» The Combine Incubator

2125 Transformation Drive
Suite 1000
Lincoln, NE 68508
<https://www.nebraskacombine.com>

From initial goal setting and idea assessment to preparation for a capital raise, the Combine Program is designed to assist entrepreneurs on an individual basis. With a focus on food and ag tech, the Combine supports undergraduate and graduate students, faculty and staff, and the general statewide community. Entrepreneurs in eastern Nebraska are encouraged to utilize the incubation space, however, the program is available on demand digitally across the state.

»» Innosphere Ventures

<https://innosphereventures.org>
Contact NUtech Ventures for an introduction.

The Innosphere Ventures program focuses on ensuring companies are investor-ready: connecting founders with experienced advisors and early hires, making introductions to corporate partners, exit planning, and accelerating top-line revenue growth. Innosphere supports entrepreneurs in many industries, including but not limited to: bioscience, medical device, energy, advanced materials, hardware, enterprise software, fintech, and artificial intelligence.

Additional Startup Resources

» Invest Nebraska

801 R Street, Suite 1
Lincoln, NE 68508
<https://www.investnebraska.com/>
(402) 742-7860

Invest Nebraska is led by a team experienced at growing early-stage and lower-middle-market companies. The organization is committed to growing Nebraska's economy by assisting entrepreneurs and investing capital in those companies that have growth potential. Collaboration with strategic partners, state government, communities, and post-secondary education institutions is important.

» Midwest I-Corps™ Node (MWIN)

<https://www.midwesticorps.org/>
Contact NUtech Ventures for details

MWIN is part of the National Innovation Network, a national network of NSF-funded researchers from I-Corps™ Teams, Sites, and Nodes. Working together, this network of thinkers addresses America's need for innovation education. MWIN serves as a hub for education, infrastructure and research that engages academic scientists and engineers in innovation. MWIN hosts world-class training programs designed to get researchers to extend their focus beyond the laboratory and accelerate the transfer of cutting-edge research into commercial success.

» Midwest Research University Network (MRUN)

<https://www.mrun.us>
Contact NUtech Ventures for details

MRUN provides programming focused on building and supporting a Midwest research commercialization culture that is transparent, systematic and connected. MRUN connects investors and talent to Midwest-based research organizations in pragmatic, highly-curated events. Most of these events are virtual. All of them result in targeted, productive conversations and stronger connections. MRUN events are intentionally time- and cost-efficient; they're designed to help participants build relationships and drive deal-making.

» National Science Foundation I-Corps™ Teams

https://www.nsf.gov/news/special_reports/i-corps/
Contact NUtech Ventures for details

The NSF I-Corps™ Teams program purpose is to identify NSF-funded researchers who will receive additional support in the form of entrepreneurial education, mentoring and funding to accelerate innovation that can attract subsequent third-party funding. Researchers interview stakeholders to understand their needs and then use that feedback to guide decisions about a startup company or technology commercialization. After participating in the program, researchers will have: (1) a clear go/no go decision based on an assessment of the overall business model; (2) substantial evidence for or against product-market fit, with a definition of the customer segments and corresponding value propositions; and (3) a compelling technology demonstration for potential partners.

» Nebraska Angels

PO Box 81431
Lincoln, NE 68501
<https://www.nebraskaangels.org/>
info@nebraskaangels.org

Nebraska Angels was founded in 2006 to support local economic development and build the entrepreneurial community. The member-led network of accredited investors are passionate about startups and helping entrepreneurs scale with necessary capital.

» Nebraska Business Development Center

College of Business Administration
200 Mammel Hall
6708 Pine Street
Omaha, NE 68182
<https://www.unomaha.edu/nebraska-business-development-center/>
nbdc@unomaha.edu
(402) 554-6232

The University of Nebraska at Omaha, College of Business Administration, hosts the Nebraska Business Development Center (NBDC). NBDC is a statewide program, with 10 office locations across Nebraska, that supports small business growth. NBDC's credentialed consultants provide confidential, one-on-one business services to entrepreneurs, established business owners, innovators and economic and community development professionals. NBDC's services are provided mostly at

no charge to the client. The program is hosted by UNO and supports its academic mission, and that of the other four higher education partners, by employing the talents of graduate and student workers in all programs of NBDC. These students receive applied, experiential learning opportunities, working directly with clients under the supervision and direction of the NBDC consultants. Students learn what it takes to start or grow a business in Nebraska, an experience that supplements their academic pursuits.

Program areas include:

- The Small Business Development Center (SBDC) of the U.S. Small Business Administration
- The Procurement Technical Assistance Center (PTAC) of the Defense Logistics Agency
- The FAST program of the U.S. Small Business Administration
- The EDA University Center of the U.S. Department of Commerce, NU Connections
- SourceLink® Nebraska, a statewide SourceLink® Network

» Nebraska Department of Economic Development

301 Centennial Mall South,
4th Floor
Lincoln, NE 68508
<https://opportunity.nebraska.gov/start-your-business/>
(800) 426-6505

» NMotion: Nebraska's Startup Accelerator

151 N. 8th Street, Suite 517
Lincoln, NE 68508
<https://www.nmotion.co>
info@nmotion.co
(402) 875-4166

NMotion is Nebraska's premier startup accelerator. NMotion started as an idea to see if the burgeoning Lincoln startup community could come together and help move startups forward, faster. The idea was to provide a small amount of capital, shared office space, mentors, and a deadline to make as much progress as possible on a new startup idea. It worked. Since 2013, NMotion has helped dozens of companies and now is part of gener8tor, a nationally-ranked, GOLD-tier accelerator in the United States. NMotion operates three main programs:

- [Accelerator Studio](#): the five best individuals and teams from across the globe will spend 16 weeks building a startup from scratch in Lincoln while earning a \$100k investment.
- [Venture Residency](#): ten participants, each receiving a \$3,000 stipend, will take part in this venture creation sprint to test four business concepts over the course of four weeks.
- [gBETA Lincoln](#): a free, seven-week accelerator for early-stage companies with local roots. Each program is capped at five teams, and requires no fees and no equity.

» Sustainable Heartland Accelerator Regional Partnership Hub (SharpHub)

<https://www.sharpideahub.com/>
Contact NUtech Ventures for details

A significant part of SHARPhub's focus is helping startups develop competitive SBIR and STTR grant applications to provide seed capital to fund early-stage research and development. These federal programs provide non-dilutive funding that encourages technology-based small companies to explore high risk technologies and profit from their commercialization. In addition, SHARPhub offers the Mentoring, Assessment & Planning (MAP) Program to develop strong commercialization plans for SHARPhub companies to put them on a stronger development path. A consultant is assigned to the company to help develop a business plan that enables the likelihood of funding through an SBIR grant and/or equity provider application.

This guide is meant as a starting point for aspiring University of Nebraska entrepreneurs aiming to commercialize a technology developed at UNL. For more information, you are encouraged to contact NUtech Ventures at info@nutechventures.org or 402-472-1783. We're looking forward to working with you, answering your questions and connecting you with entrepreneurship resources.

Appendix 1: Corporate Structure

Entities and Legal Formation of a Business developed by the Weibling Entrepreneurship Clinic at the University of Nebraska College of Law. For more information, contact the clinic at eclinic@unl.edu.

Startups can be formed under different business entities recognized by law. While there are many options available to legally form the business, the three most common entities for technology-driven startups are: C-Corporations, Limited Liability Corporations (LLCs), and S-Corporations.

Each one of these entities is governed by different rules regarding taxation, ownership, fundraising, governance, and employee compensation. It is critical for startups to consult an attorney who has experience advising startups prior to deciding a business entity type. The following chart illustrates the different types of business entities and their characteristics.

	Sole Proprietorship	Partnership	C-Corporation	S-Corporation	LLC
Owners	One individual called the owner.	Two or more individuals called partners. Must be carrying on a business together for profit.	One or more individuals called stockholders or shareholders.	At least one, but no more than 100 individuals called stockholders or shareholders. All must be U.S. citizens or permanent U.S. residents.	One or more individuals called Members. Multi-Member LLCs have more than one Member. Single Member LLCs have one Member.
Ownership	Business and owner are one and the same. Owner owns all of the business and its assets.	Partnership interests are equal shares by statute unless otherwise agreed in a Partnership Agreement.	Shares of company stock typically evidenced by stock certificates. Can have multiple classes of stock with different rights and powers.	Shares of company stock typically evidenced by stock certificates. Can only have one class of stock (preferred shares not permitted).	Membership Interest expressed as a percentage or as units. Number of units or interest percentage set forth in an Operating Agreement.
Management	Owner manages and controls all aspects of the business.	Management and control shared equally by all partners unless otherwise agreed in a Partnership Agreement. Governing document is the Partnership Agreement, whether in writing or orally agreed.	Centralized in a Board of Directors elected by the shareholders. Board can delegate authority to Officers. Shareholders vote on major decisions. Governing documents are the Articles of Incorporation and Bylaws.	Centralized in a Board of Directors elected by the shareholders. Board can delegate authority to Officers. Shareholders vote on major decisions. Governing documents are the Articles of Incorporation and Bylaws.	Flexible. Either: (1) Manager-managed, where elected managers make day-to-day decisions; or (2) Member-managed, where all the members vote on decisions. Governing document is the Operating Agreement.
Taxes	Disregarded Entity Owner simply reports all profits and losses on personal tax return. Owner is responsible for paying self-employment tax.	Pass-Through Tax Partnership does not pay tax; partners pay taxes on their respective share of profits. Each partner is responsible for paying self-employment tax. "Phantom tax" can occur if the business retains or reinvests its income.	Double Taxation Corporation pays taxes on all profits. Shareholders must also pay personal income tax on any distributions they receive.	Pass-Through Tax Corporation does not pay tax; shareholders pay taxes on their respective share of corporation profits. Each partner is responsible for paying their own self-employment tax. Can designate a reasonable portion as salary subject to employment tax with rest as income on investment. "Phantom tax" can occur if the business retains or reinvests its income.	"Check the Box" Taxed the same as sole proprietorship (if one owner) or partnership (if two or more owners). May elect to instead be taxed like an S-Corporation or a C-Corporation.
Liability	No Liability Protection The owner is personally liable for all business debts and claims.	No Liability Protection All partners are jointly and severally liable. Each partner can be sued for all the business debts and all other partners are liable to contribute.	Limited Liability Stockholder liability is limited to the capital they contributed. They are not personally liable for business obligations. Exception: Piercing the Corporate Veil	Limited Liability Stockholder liability is limited to the capital they contributed. They are not personally liable for business obligations. Exception: Piercing the Corporate Veil	Limited Liability Member liability is limited to the capital they contributed. They are not personally liable for business obligations. Exception: Piercing the Entity Veil
Formation	Formation is automatic -- no filings or documents are required. May register trade name with the Secretary of State.	Formation is automatic -- no filings or documents required. Automatic if doing business for profit with another individual. May draft a partnership agreement and register trade name with the Secretary of State.	File Articles of Incorporation with the Secretary of State. Publish Notice of Organization in the newspaper. Make biennial filings to the Secretary of State. Draft bylaws.	File Articles of Incorporation with the Secretary of State. Publish Notice of Organization in the newspaper. Make biennial filings to the Secretary of State. Draft bylaws. File IRS Form 2553 to make S-Corporation election.	File Certificate of Organization with the Secretary of State. Publish Notice of Organization in the newspaper. Make biennial filings to the Secretary of State. Draft an Operating Agreement.
Other Concerns			Strict structural rules and more regulated than other business forms. Investors more likely to invest in C-Corporations than other entity forms.	Strict structural rules and more regulated than other business forms.	



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