Tech Launch Arizona

Start-up Guide
For New Companies Licensing Technologies
Invented at the University of Arizona
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The Idea-to-Impact Continuum

Through its comprehensive services, Tech Launch Arizona facilitates the entire Idea-to-Impact Continuum, bringing ideas from their beginnings in scientific research, all the way through defined commercial pathways to the marketplace where they can create powerful economic and social impact.

Tech Launch Arizona (TLA) connects the UA research enterprise with the technology business community to enhance the influence of UA research, intellectual property technological innovation and assets of Tech Parks Arizona. Under the leadership of Vice President David Allen, TLA is an essential part of the university’s Never Settle strategic plan and reports directly to UA President Ann Weaver Hart.

TLA consists of four units with unique yet complementary functions:

- **Tech Transfer Arizona** moves UA technologies into the marketplace by collaborating with researchers to assess, patent, license and market new intellectual property (IP) developed at the university. We negotiate agreements with companies – both existing and start-ups – to bring those inventions to the world.

- **Corporate Relations Arizona**, the business world’s “front door” to the UA, builds valuable, multi-faceted partnerships with large corporations, bringing UA talent, innovative capacity and intellectual assets to the development of market-focused solutions.

- **Tech Parks Arizona** cultivates places where the expertise of the University of Arizona comes together with forward drive of technology companies and entrepreneurs from around the region and around the world. Here, academia and industry come together to commercialize and advance leading edge innovations.

- **Wheelhouse Arizona** connects investigators with business leaders and domain experts to bring new technologies to the marketplace via existing and start-up companies and validates the commercial relevance of technologies through Proof of Concept and Commercial Feasibility Programs. For start-ups, we help to prepare the company for launch. After launch, we stay involved, maintaining deep relationships with enterprises created to commercialize impactful UA inventions. We also help entrepreneurial students, connecting them with resources and opportunities to help bring their business ideas to life.
Together, these units offer a full array of services and resources to assess and develop new venture opportunities.

The process of technological innovation – the transformation of knowledge into products, processes, systems and services – is a driving force for business formation and growth, wealth creation and social well-being. Tech Launch Arizona represents new ways of pursuing these goals.

*Learn more and connect at [techlaunch.arizona.edu](http://techlaunch.arizona.edu).*
The TLA Start-up Pathway

The following diagram – a deeper look into the underlying details of the Idea-to-Impact Continuum above – reflects the process involved in bringing a new technology to market through the approach of starting a new company, and how the Tech Transfer Arizona and Wheelhouse Arizona teams collaborate to support technology development and commercialization. The rest of this guide describes each of these steps.

1. Investigator: Disclosure to Technology Transfer

Faculty research often leads to new technologies that may have potential to be licensed – either to an existing company or to a new start-up. Licensing managers embedded within the UA’s major colleges serve as the first point of contact for research-oriented professionals who wish to disclose new technology.

For more information and a list of licensing managers, visit techlaunch.arizona.edu/staff.

2. Technology Transfer: Market & IP Assessment

The licensing manager works closely with the investigator/s (inventors) to manage the disclosure process and to conduct an initial market assessment. Based on their findings and the goals of the inventor(s), one of a few options may be considered: license the technology to an existing company; continue the research for further development; or deem the technology not protectable. If there is a lack of clarity about the technology’s commercial relevance or if it looks like the technology may be better served through a new venture
start-up effort, the licensing manager may engage support from Wheelhouse Arizona for further assessment of commercial potential.

3. Technology Transfer: License to Existing Company

Based on the interest of the inventor(s) and assessment findings, the best course of action for the technology may be a license to an existing company. In this case, the licensing manager will work to identify, in conjunction with TLA Marketing and Communications, a licensee.

4. Wheelhouse: Determine Commercial Potential

The Wheelhouse team works closely with the licensing manager and the inventor/s to assess the commercial potential of the invention and, when appropriate, build a new start-up to develop and commercialize the technology. The Wheelhouse team engages external domain experts to help understand the technology and consider various applications, and may pursue Proof of Concept or Commercial Feasibility Study program funding to help understand the market and move the project forward.

This is not a linear process; not all technologies require participation in the Proof of Concept or Commercial Feasibility Study programs. Each case is unique and the team will work closely with the inventor(s) to identify the steps needed to assess the technology, market opportunities, and the most promising commercial pathway.

4.1 External Expertise

The Wheelhouse team engages a network of experts who volunteer their time to support new projects. This network includes domain experts, business drivers and other management team candidates, advisors and professional service providers (legal counsel, accounting, etc.). The Wheelhouse team, together with the inventor(s) and the licensing manager, determine the best course of action for the project at any stage and look for external expertise. These experts typically volunteer their time at no charge; their motivation may be to “give back” to the community and/or the University, to have an early view of new technologies, or to identify future companies they may wish to partner with. The Wheelhouse team works with the inventor(s) identify the right expertise needed at the right time.

4.2 Proof of Concept Program

The Wheelhouse Proof of Concept (POC) program provides funding for early development support directed to prototype development and validation of key market alignment propositions for technologies developed by UA researchers, helping to establish a path towards commercialization.

Novel university developed technologies are inherently very early stage. They are often too young for external investment, yet beyond funding eligibility for general lab research. As such, investigators find themselves in a gap between the current state of technology development and commercialization requirements. The POC program assists these investigators in exploring and verifying specific technical and commercial dimensions of their inventions, moving them closer to outside funding. Sample POC objectives might include: design, construct, and evaluate a prototype device, delivery system, software, etc.; generate data to support potential commercial value of the invention; validate
software code for commercial application; or test/verify scalability and efficacy. Proof of Concept funding is not intended to further the commercial development of the business (hiring resources, developing a website, etc.). POC funding is initiated prior to a license and used to validate and incrementally advance the technology.

The application process begins with a letter of interest. The Wheelhouse team accepts POC letters of interest throughout the year and evaluates each on its own merits (not a competitive review).

To learn more about how this program works, the letter of interest application process and eligibility, visit techlaunch.arizona.edu/proof-concept-program-0.

### 4.3 Commercial Feasibility Study Program

The Wheelhouse Commercial Feasibility Study (CFS) provides financial resources and domain expertise to assess the commercial relevance of an invention. The study, developed by a team including the inventor(s), the Wheelhouse team, the licensing manager and outside professionals, creates an overview of business issues related to an invention or discovery. When complete, the team has an understanding of the viability of the technology and cost/benefit associated with commercialization. A CFS is valuable in helping to determine likelihood of commercial success, and can be further developed into a business plan. TLA and the inventor(s) collaborate to determine an appropriate timeframe for the CFS. CFS awards are to be used to hire qualified consultants or pay for (acceptable) studies. TLA will work with interested inventor(s) to determine the appropriateness of a CFS, and once the parties agree on the feasibility study focus, TLA can also provide lists of resources. In some cases, based on the CFS, TLA will recommend an in-depth Proof of Concept project or other strategy to verify a technology’s commercial potential.

To learn more about the CFS application process, eligibility, expected outcomes and examples, please visit: techlaunch.arizona.edu/wheelhouse/commercial-feasibility-study-program.

### 5. Wheelhouse: Prepare Company & Prepare for License

Based on technology assessments and discussions with the inventor(s), if it is determined that a start-up is the best pathway for a technology, the licensing manager and Wheelhouse team will work with the inventor(s) to prepare both the company and the technology for license and start-up.

Company preparation includes team and company formation, conflict of interest review and institutional approval processes, and business case development. Simultaneously, technology transfer preparation may include a “no-shop” or option agreement, and ultimately a license. TLA looks to license new technology to a company that holds the promise of sustained success, with a plan and leaders in place to secure investment and deploy the business.

**5.1 Team and company formation**

Every successful company is based on a strong business team that offers the same level of expertise for both business and scientific leadership. A high-performance team
facilitates launch and support the ongoing growth and success. Wheelhouse Arizona works with the inventor(s) to identify and build business leadership for their new start-up to ensure success prior to final license steps.

With the TLA approach, the inventor is an integral part of a high-quality team, where the quality of the team matches the quality of the technology. A typical team may include:

- **Inventor(s):** TLA can help the inventor determine level of commitment and role he/she desires to play in the new company. Often the inventor will choose to serve as a technical or scientific advisor while maintaining their position within the university.
- **Business Driver:** This person is the new venture champion. He/she will be the team lead, driving the business forward. This is generally a president or CEO, and may be considered as interim or long-term leadership. An interim business driver can help launch the company and act on opportunities until the long-term leader is identified.
- **Management Team:** In addition to the business driver, there are other important positions to be filled depending on the needs of each project. These positions may include operations, marketing, sales, accounting, regulatory support or others – again depending on the unique needs of the project. The Wheelhouse team can help the inventor(s) define and build out this team.
- **Advisors:** These are external (non-employee) advisors and professional service providers who help guide and develop the company. Examples include legal counsel, accountants, strategic partnerships, industry advisors and so forth. Advisors may eventually become management team members, directors, investors or customers as the company grows.
- **Board of Directors:** This is an appointed board with a set of formal duties and responsibilities for the company, and is often represented by key stakeholders (investors, owners, etc.). Most start-up companies form a Board of Directors at the time of outside funding. TLA is available to provide guidance in this area.

In each case, TLA can help determine how best to engage this support, and set expectations for all parties involved to ensure win-win relationships.

In addition to building the team, several essential steps need to be taken to develop the right company entity, establish key agreements, set up a reporting and governance structure, ensure continued protection of intellectual property for the new company, and so forth. The Wheelhouse team works with the inventor(s) to introduce legal counsel and provide support for these processes.

### 5.2 Conflict of Interest and Institutional Approval

All aspects of conflict of interest (COI) and conflict of commitment (COC) seek to separate and distinguish the focus of ongoing university research and educational responsibilities from an employee’s involvement in any effort being conducted for a company in which the employee has an ownership interest. The licensing manager and the Wheelhouse team work closely with the faculty member(s) to complete a COI worksheet and navigate the review and approval process. The primary goal of the COI worksheet is to describe the business, and to define how the researcher, students, staff or others may be involved in the company. Specific information in the worksheet includes:
- Standard identifying information for those with interest in the new company
- Business summary
- Proposed organizational structure and roles
- Research risk (human subjects, animal testing, other)
- Description of separation of duties between new company and the university
- Student or trainee involvement
- Anticipated relationship between the new company and the university

The Institutional Review Committee (IRC) will review the faculty members’ roles in both the start-up company and their university research. The IRC will use information provided in the COI form and from each investigator’s Disclosure of Significant Financial Interest (www.orcr.arizona.edu/coi/forms) to determine if any conflict of interest exists, and if so, to make a management plan recommendation.

5.3 Business case development

Before a license can be successfully executed, the new company team needs to present a business case. This is typically a summary document, not necessarily a full business plan, which demonstrates that the team has a well thought-out plan to move the company forward. A well-formulated business case includes the following elements:

- Non-confidential summary
- Company name, team and roles
- Market definition and size
- Product definition
- Business model
- Next steps to secure first customer
- Financial forecast (if possible)

While the business team creates these documents, the Wheelhouse team is available for guidance and support.

5.4 No-shop and option agreements

Prior to the license, a letter that states that the university will not market the technology, called a No-Shop Agreement, may be provided by the licensing manager. This provides time for the inventor(s) to explore commercial potential, solve specific technical hurdles, and decide whether or not to pursue a start-up based on the technology. Once the inventor(s) and the UA team have sufficient understanding and confidence in the commercial potential to proceed with a start-up, the UA and the new company, or significant participants, may enter into an Exclusive Option or License Agreement. An Option may enable ongoing patent work, as well as development of the commercial pathway and the team, in preparation for the exclusive license.
6. License & Launch

Once the inventor(s) and start-up team are ready to license the technology, they must have:

- Completed the Conflict of Interest process successfully;
- Formed a business team with steps to build out the team and advisors;
- Developed a viable business case approved by the Wheelhouse team;
- Secured legal counsel; and
- Established a formal entity with operating agreements and capitalization table.

Once they meet these requirements, the license can be executed. A license will be to the start-up company – not individuals – with the appropriate signature (company officer) and reasonable, negotiated fees and royalty obligation terms negotiated. When the technology has been successfully licensed to a company with promise of sustained success, it has the documents, plan and leaders in place to secure investment and launch. At that time, TLA may continue to participate in the venture via providing investment contacts and launch mentoring community resources.

The criteria for these agreements varies based on the technology and may include a fee.

Start-up: Next Steps

1. Building a Funding Strategy

Most start-up companies require funding at some point to move forward, and this should be an integral part of the overall business strategy developed by the business team. Funding can come from many different sources: friends and family, grants, equity investment, loans, crowd-funding and even potential customers. The type and timing of funds sought should match the needs of the company. Furthermore, think of the investment as an opportunity for strategic partnership – funds may bring additional expertise, contacts, support or future funding. The Wheelhouse team can help you navigate this process and provide some general background on current investment trends and opportunities.

1.1 Grants

Often start-up companies pursue grant opportunities first. Not only are grants “free money” (non-dilutive capital), but receiving a grant can bring immediate value to the start-up, and may provide industry contacts, partnerships, and further validation of the technology and/or market. More importantly, writing a grant can help the start-up team better articulate the business. This is a valuable opportunity to shape the mission and direction of the company and can be the catalyst to document and archive important information for the business.

Following are notes on the federal SBIR/STTR programs. However, in searching for new grant opportunities, teams should also consider relevant technology or industry associations, key market drivers or city and state organizations. The Wheelhouse team can help brainstorm and assess new opportunities.

Federal agencies set aside specific percentages of their grant budgets for awards to small businesses to advance technological innovation through the Small Business Innovation Research (SBIR) and Small business Technology Transfer (STTR) grant programs. These programs provide an exceptional opportunity for start-up companies to further their
product development and commercialization efforts. Awards may range from $100k (Phase I Proof of Concept) to over $1million (Phase II Commercialization) depending on the agency and nature of the project.

Awards are competitive and the landscape of SBIR/STTR grants is changing. Agencies are still looking for a great technology plan, but they also want to understand the commercialization pathway and the company’s ability to execute its proposal, suggesting again that funding should be part of an overall strategic plan to move the company forward. To learn more, please visit www.sbirtucson.org.

1.2 Building value
A successful start-up builds value over time. Key accomplishments – strategic partnerships, new IP, added customers, industry recognition, specialty expertise and regulatory approvals – bring additional value to the start-up. The right business team can create a plan for building value based on future needs, and will help determine the start-up company’s perceived value for outside investment. Each project is unique. The Wheelhouse team will work with the start-up team to understand valuation and investment strategies where needed.

2. Engaging Tech Launch Arizona Going Forward
The University of Arizona’s goal is to facilitate a start-up that will be both successful and sustainable over time. Therefore additional support is available once the technology has been licensed. The licensing manager and the Wheelhouse team can offer advice and make recommendations for the right resources to carry the start-up forward, such as:

2.1 Facilities and business development
A range of facilities and services are available to the start-up after launch. This may include access to office space, lab facilities, test and evaluation expertise, and business development resources located at the UA Tech Parks and Arizona Center for Innovation, or through a partner within the local entrepreneurial community. As the start-up grows and its needs change, Wheelhouse can work with the start-up team to find appropriate resources for moving the company forward.

2.2 Marketing
Start-ups founded on university technology have a significant advantage in access to resources and support. There are clear guidelines defining how businesses may use the UA logo and collateral, and how the relationship must be presented in promotional materials, so it is important to work closely with the UA marketing team. The Tech Launch Arizona Marketing & Communications team can connect you with these resources.

2.3 Students
Student intern positions provide an exceptional learning opportunity for the student and bring value to the growth of the start-up company. The Wheelhouse team along with the licensing manager can work with the start-up company to identify the right opportunities. However, students over whom inventor/s have academic oversight may not be involved in company activities or university research that will benefit the company. If students are
involved in research that will benefit the start-up, such as through a research or other grant, the students may be assigned to other advisors. Additional information can be found in the Conflict of Interest documentation; for details, please connect with the Wheelhouse team.

Connect with Tech Launch Arizona

Thank you for taking the time to review our Start-up Guide. If you are interested in learning more about TLA and the Wheelhouse team, or if you’re searching for detailed information on programs listed in this guide, please visit techlaunch.arizona.edu/wheelhouse.

We look forward to working with you.