

GERMINATE BY HIPLAN SBIR CHECKLISTS



Seeding Success: Cultivating Non-Dilutive Funding Through the Small Business Innovation Research (SBIR) Grant Program

SBIR (Small Business Innovation Research) funding offers several significant benefits for startups, particularly in the field of innovation and research. One of the primary advantages is that it provides non-dilutive funding. This means startups can obtain capital without giving up any equity, a major plus compared to traditional venture capital or angel investments. Since the funds don't need to be repaid, this also alleviates the burden of debt that often comes with loans.

Additionally, SBIR grants are designed to stimulate technological innovation and cater to federal research and development needs. They also aim to foster and encourage participation in innovation by socially and economically disadvantaged groups. The program supports private-sector commercialization of innovations derived from federal R&D funding, which can be a significant boost for a startup's growth and market presence.

The SBIR program includes three phases. Phase I focuses on validating the concept with awards typically up to \$150,000, while Phase II provides up to \$1,000,000 for further development if Phase I objectives are met. Phase III, although it does not provide direct funding, involves follow-on non-SBIR funded R&D or production contracts for products or services that might be used by the U.S. government.

While the benefits are substantial, it's important to note that obtaining an SBIR grant can be challenging. The application process can be demanding and time-consuming, and there is a relatively low success rate for proposals. Furthermore, maintaining compliance with reporting and regulatory requirements can be demanding.

Overall, SBIR grants represent a valuable resource for startups seeking to develop innovative technologies or services, especially for those who are looking to avoid the pitfalls of equity financing and retain control over their intellectual property and business direction.

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Creating a comprehensive checklist for Small Business Innovation Research (SBIR) grant applicants is a vital step in ensuring a well-prepared and competitive application. This checklist will guide applicants before, during, and after the application process.

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PRE-APPLICATION

Things to think about and do to prepare for applying to a Small Business Innovation Research opportunity. Registration for SAM and DUNS and Grants.gov takes time, register for these early.

2

APPLICATION

Things to think about and do while writing the application. SBIR is highly competitive. You will need a strong application. Remember, omission of a required element will disqualify your application no matter how strong.

3

POST-APPLICATION

Things to think about and do whether you are an awardee or not.

This document was created January 2024. We avoid being too specific as programs are unique and changes may be made at any time. We highly recommend making sure you look at the latest available information from each program.

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PRE-APPLICATION

1. Eligibility Check: Verify that your business meets the SBIR program's eligibility criteria (e.g., size, ownership structure). Register in SAM, UEI and Grants.gov systems. See the additional information section after the checklists.
2. Research Funding Agencies: Identify which government agencies (e.g., USDA, NSF, NOAA) align with your project's focus. See the additional information section.
3. Understand the Solicitations: Thoroughly read the solicitations from relevant agencies to understand their priorities and requirements.
4. Align Business Goals: Ensure your project aligns with both your business goals and the grant's objectives.
5. Gather Necessary Documents: Compile business registration documents, previous grant history, financial statements, etc.
6. Budget Planning: Draft a preliminary budget for your project.
7. IP Considerations: Understand the intellectual property landscape and how it relates to your project.
8. Build Your Team: Identify key personnel, including any required partners or collaborators.
9. Letter of Intent: Check if a letter of intent is required and prepare one if necessary.
10. Seek Advice: Consider consulting with a grant writer or someone experienced in SBIR applications. See additional information section.

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APPLICATION

1. Follow Guidelines Strictly: Adhere to the format, content, and length guidelines provided in the solicitation and create a compliance checklist.
2. Clear Project Description: Write a concise, clear, and compelling description of your project. Include the problem, solution, and impact.
3. Define Objectives and Milestones: Clearly outline your project's objectives, milestones, and deliverables based on the technology.
4. Detailed Budget Justification: Provide a detailed budget and justify each expense.
5. Proof of Concept/Evidence: Include any data or evidence that supports the feasibility of your project.
6. Letters of Support: If applicable, include letters of support from partners or stakeholders.
7. Review and Revise: Have team members or external advisors review and provide feedback on the proposal.
8. Ethics and Compliance: Ensure your proposal meets all ethical standards and regulatory compliance requirements.
9. Submission Check: Double-check submission deadlines and requirements. Recheck your checklist from step 1.
10. Submit Your Proposal: Submit the proposal a day or two prior to the deadline to avoid technical issues with Grants.gov, internet connectivity, and other unforeseen issues.

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POST-APPLICATION

1. Confirmation of Submission: Ensure you receive confirmation that your application has been successfully submitted.
2. Record Keeping: Keep copies of the application and all correspondence.
3. Post-Submission Updates: Provide any required updates or additional information promptly if requested by the funding agency.
4. Prepare for Queries: Be ready to answer any follow-up questions or provide additional information.
5. Feedback Request: If not successful, request feedback to improve future applications.
6. Plan for Fund Utilization: If successful, start planning for fund allocation and project initiation.
7. Reporting Requirements: Understand and prepare for any reporting requirements or audits.
8. Project Implementation: Begin implementing the project according to the proposed timeline and objectives.
9. Stay Updated: Keep an eye on any new opportunities or changes in SBIR policies that might affect your project.

Remember, attention to detail and adherence to guidelines are crucial in every stage of the SBIR grant application process.

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POST-APPLICATION

Certainly! Not being awarded funding for a proposal can be disappointing, but it's an opportunity for learning and improvement. Here's a checklist for those who have not been awarded funding for their proposal:

1. Review Feedback Thoroughly

- ✔ Carefully read any feedback provided by the funding agency.
- ✔ Identify key areas of strength and areas for improvement in your proposal.

2. Request Additional Feedback

- ✔ If detailed feedback wasn't provided, politely request more specific comments from the agency.
- ✔ Seek clarity on any points that are vague or unclear.

3. Conduct a Self-Evaluation

- ✔ Reflect on your proposal to identify potential weaknesses or gaps.
- ✔ Compare your proposal against the solicitation guidelines to see if any requirements were missed.

4. Engage with Peers and Mentors

- ✔ Discuss your proposal and the feedback with colleagues, mentors, or industry experts.
- ✔ Consider joining relevant professional networks or forums for additional insights and advice.

5. Research Successful Proposals

- ✔ Study examples of successful proposals, if available, to understand what made them stand out.
- ✔ Look for patterns in approaches, writing styles, and detailed project plans.

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6. Improve Your Proposal

- ✓ Incorporate the feedback and insights gained to refine your proposal.
- ✓ Focus on clearly articulating the problem, solution, and impact of your project.

7. Enhance Project Planning

- ✓ Revisit and strengthen your project plan, budget, and timeline.
- ✓ Ensure that your objectives are realistic, measurable, and aligned with the funder's priorities.

8. Strengthen Partnerships and Collaborations

- ✓ If applicable, work on building stronger partnerships or collaborations to enhance your proposal's credibility and feasibility.

9. Update Literature Review and Data

- ✓ Ensure that your proposal includes the latest research and data relevant to your project.

10. Consider Alternative Funding Sources

- ✓ Research other grants or funding opportunities that may be suitable for your project.
- ✓ Explore options like crowdfunding, partnerships, or private investments.

11. Attend Workshops and Training

- ✓ Participate in grant writing workshops or training sessions to improve your skills. See additional information section.
- ✓ Stay updated with the latest trends and changes in grant applications relevant to your field.

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12. Reapply or Pivot

- ✔ Determine whether to revise and reapply in the next funding cycle or seek alternative opportunities.
- ✔ Be open to pivoting your project idea if necessary, based on the feedback and your own assessments.

13. Maintain a Positive Attitude

- ✔ Stay motivated and view the experience as a learning opportunity.
- ✔ Persist in your efforts and remain committed to your goals.

Remember, not receiving funding is not a reflection of the value of your work or your capabilities. It's a step in the journey of innovation and progress, providing a chance to refine and strengthen your proposal for future success.

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ADDITIONAL INFORMATION

The Small Business Innovation Research (SBIR) program is a United States government program, coordinated by the Small Business Administration (SBA), intended to help certain small businesses conduct research and development (R&D). The eligibility requirements for the SBIR program are quite specific:

1. Organizational Type: The applicant must be a for-profit business.
2. Size of Business: The business must be a small business as defined by SBA standards. Typically, this means having 500 or fewer employees, but the specific definition can vary depending on the industry.
3. Ownership and Control:
 - The business must be more than 50% owned and controlled by U.S. citizens or permanent resident aliens.
 - Alternatively, it can be more than 50% owned and controlled by another for-profit business that is more than 50% owned and controlled by one or more U.S. citizens or permanent resident aliens.
4. Independence: The business must be independently owned and operated, not a subsidiary of another company.
5. Location: The primary business operations must be located in the United States.
6. Principal Researcher Employment: The principal investigator (PI) must be primarily employed with the small business at the time of award and for the duration of the project period, unless otherwise approved by the funding agency.
7. Work Performance: A significant portion of the R&D work (usually at least two-thirds for Phase I and one-half for Phase II) must be performed by the small business.

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8. **Multiple Applications:** A small business may submit multiple applications, but each application must be for a distinctly different project.
9. **Previous Awards:** Businesses that have previously received SBIR awards may apply again, but they must disclose any related awards to ensure there is no overlap or duplication of effort.
10. **Compliance with Federal Regulations:** Businesses must be in compliance with federal research misconduct and lobbying regulations.
11. **Other Agency-Specific Requirements:** Some federal agencies that participate in the SBIR programs may have additional or slightly different requirements. It's important to check the specific guidelines of the agency you're applying to.
12. **Registration Requirements:** Businesses must be registered with the System for Award Management (SAM), have a DUNS number, and be registered with the SBA's Company Registry Database. Applications are submitted on Grants.gov.

The UEI, or Unique Entity Identifier, is a 12-digit number that serves as the official identifier for entities doing business with the U.S. federal government. It replaced the DUNS number in April 2022 and is now required for all entities seeking federal contracts, grants, or other forms of financial assistance.

Key Points about the UEI:

- **Purpose:** The UEI streamlines the entity identification and validation process, making it easier for the government to track and manage its interactions with various organizations.
- **Requirement:** Any entity wishing to do business with the federal government must obtain a UEI by registering in the System for Award Management (SAM.gov).
- **Obtaining a UEI:** The UEI is assigned free of charge during the SAM.gov registration process.
- **Usage:** The UEI is used across various government systems, including those for contract management, grant applications, and federal assistance programs.

These requirements are designed to ensure that SBIR funds are awarded to eligible, small, independent businesses capable of conducting high-quality research and development. It's crucial to thoroughly review the latest SBIR solicitation from the specific federal agency you're interested in, as there may be additional or updated requirements.

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ADDITIONAL INFORMATION

Several federal agencies participate in the Small Business Innovation Research (SBIR) program, each with its own set of priorities, research interests, and budgets. The key agencies that participate in the SBIR program include:

1. Department of Agriculture (USDA)
 - Focuses on agricultural science and technology.
2. Department of Commerce
 - National Institute of Standards and Technology (NIST): Focuses on technology, measurement, and standards.
 - National Oceanic and Atmospheric Administration (NOAA): Focuses on atmospheric and oceanic research.
3. Department of Defense (DoD)
 - Covers a wide range of defense-related research and development areas.
4. Department of Education
 - Focuses on education technology and innovation.
5. Department of Energy (DOE)
 - Emphasizes energy-related research and development.
6. Department of Health and Human Services (HHS)
 - National Institutes of Health (NIH): Focuses on medical and life sciences research.
 - Centers for Disease Control and Prevention (CDC): Focuses on public health and disease control.
 - Food and Drug Administration (FDA): Focuses on pharmaceuticals, medical devices, and food safety technologies.
7. Department of Homeland Security (DHS)
 - Focuses on technologies related to homeland security.

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ADDITIONAL INFORMATION

8. Department of Transportation (DOT)

- Focuses on transportation technology and innovation.

9. Environmental Protection Agency (EPA)

- Focuses on environmental technology and innovation.

10. National Aeronautics and Space Administration (NASA)

- Focuses on aerospace, aeronautics, and space technology.

11. National Science Foundation (NSF)

- Covers a broad range of science and engineering disciplines.
- NSF uses a Project Pitch process where you submit a pitch deck for review and are invited to submit an application.

Each of these agencies has specific research areas and topics that they fund through the SBIR program. It's important for applicants to closely review the topics and guidelines provided by each agency to ensure that their project aligns with the agency's interests, priorities and mission. The SBIR program is highly competitive, and understanding the specific needs and goals of the funding agency can significantly improve the chances of a successful application.

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ADDITIONAL INFORMATION

Hawaii is fortunate to have support from the Hawaii Technology Development Corporation (HTDC). HTDC provides applicants with several programs to support SBIR applicants and winners:

In 1988, HTDC began providing matching grant funds to Hawaii companies that received Federal Small Business Innovation Research Grants (SBIR). These companies are recognized for advancing technology to solve critical challenges for the nation. The Hawaii SBIR matching grant program is the longest state-funded SBIR matching program in the United States. Initially, the grant program only funded companies that received Phase I grants. In 2016, the program was expanded to help companies who are moving their advanced technology products from research into the market. Hawaii's SBIR Phase II and Phase III winners are creating the best technology solutions in the nation.

HSBIR provides matching grants to help companies develop new products to solve critical issues. Applicants must have received federal SBIR grants or contracts to qualify for the state matching grant program. The HSBIR programs provide up to 50% match for companies receiving SBIR awards. Companies may also apply for reimbursement for grant writing costs for their initial grant application.

Reach out to HTDC directly for more information.

GERMINATE BY HIPLAN STARTUP TRAITS FOR SUCCESS



The Traits of Successful Innovation Entrepreneurs

Want to become a powerhouse startup founder? Learn from the best! We've analyzed the traits of successful entrepreneurs – especially those in the agrifood tech sector – to bring you this insightful guide. Note that most of these do not require you to have a fancy title or be an expert.

Key Qualities of Top Startup Founders

1. **Unstoppable Grit:** Setbacks happen. Successful founders have the resilience to bounce back stronger and the determination to keep pushing toward their goals.
2. **Bold Vision:** They see beyond profits and focus on solving big problems and making a positive change in the world.
3. **Agility and Adaptability:** Markets change, and so do successful founders. They're flexible, pivoting when needed, and always eager to learn from feedback.
4. **Know Your Market:** Deeply understanding customers and their needs means you can target solutions that truly resonate.
5. **Tech-Minded:** Whether you build it yourself or have the right team, harnessing technology to solve problems and scale your solution is key.
6. **Leadership That Inspires:** Building great teams isn't easy. Successful founders lead with passion, attract the best talent, and create a culture of innovation.
7. **Persuasive Communication:** Pitching your idea to investors, partners, and customers requires clarity and excitement. Practice makes perfect!
8. **Customer Obsession:** Customer insights make your product irresistible. Prioritize feedback to constantly refine and improve what you offer.
9. **Smart Money Management:** From raising funds to managing cash, financial skills separate the businesses that last from those that don't.
10. **Ethics and Sustainability First:** Today's successful businesses contribute to a better world. Build ethical practices and a focus on sustainability into your business model from day one.
11. **Networking Power:** Your network is your knowledge base and support system. Build meaningful relationships within and beyond your industry.
12. **Always Learning:** Successful founders are always curious, absorbing new knowledge to adapt and grow themselves and their businesses.