FEMALE-FOCUSED BUSINESS INCUBATION IN THE TRIANGLE

An Analysis of the Need for, and Potential Design of, a Business Incubator Targeted at Women Entrepreneurs in Raleigh-Durham-Chapel Hill, North Carolina

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I can't list more than two or three women whom I engaged with during my entire run of building my startup companies. And I mean that sincerely, whether it was technical talent, investors, advisors, mentors—maybe three women tops, the entire time.

I just didn't know it was possible to have it any other way.

— Mara Lewis, Serial Entrepreneur and
Managing Director of Start Co.'s Upstart Accelerator, Memphis, TN

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EXECUTIVE SUMMARY

Introduction

This Duke University Master's thesis was completed as a pro-bono research project for the Women's Business Center of North Carolina (WBC of NC), a Durham-based nonprofit that helps women start and grow businesses throughout the state. To accelerate the growth of women-owned businesses in North Carolina, the WBC of NC is considering designing a female-focused business incubator in the Raleigh-Durham-Chapel Hill "Triangle" area. This report examines the current incubation landscape for women entrepreneurs in the Triangle, explores the need for a female-focused incubator, and provides guidance on designing an incubation program targeted at women.

Policy Questions

Is there need for a business incubator targeted at women entrepreneurs in the Triangle area of North Carolina? If so, how should the Women's Business Center of North Carolina design such an incubator to best serve women entrepreneurs?

Background

Although women-owned businesses represent a growing percentage of North Carolina's economy, women continue to be underrepresented in the field of entrepreneurship. As of 2007, the state contained 225,500 women-owned firms, representing 29 percent of all North Carolina businesses.[1] Women-owned firms brought in 75 percent less in average revenues than men-owned firms, and were about half as likely to have employees (U.S. Census Bureau, 2007). This gender gap in business ownership and business size suggests that women may not be sufficiently supported in their entrepreneurial efforts.

Business incubators offer a potential strategy to help overcome this gender gap. Business incubators are independent organizations that aim to speed the growth of early-stage startup companies, helping them to become financially viable. Incubators do this by providing management guidance, technical assistance, networking opportunities, access to capital, shared work space, and other services. As of 2012, more than 1,250 business incubators existed throughout the United States (National Business Incubation Association, 2014). For the purposes of this report, I consider business accelerators under the larger umbrella of incubation programs, given that there is no consistent definition of business acceleration (Lewis, Harper-Anderson, and Molnar, 2011; National Business Incubation Association, 2014).

No concrete data exist on the participation of women entrepreneurs across the 1,000+ incubators in the United States. However, some research does suggest that many incubators have few female tenants and offer a "masculinized" incubation environment, despite having a gender-neutral official stance (Marlow & McAdam, 2012). In addition, although research on women's performance in business incubation is

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[1] I define "woman-owned" as a woman or women having at least 51% or greater ownership of a company. The U.S. Small Business Administration divides enterprises into three gender categories: "woman-owned," "male-owned," and "equally male/female-owned." See ("Small Business Profile: North Carolina," 2013).

highly limited, some literature does suggest that business incubation may have greater benefits for women than for men, even helping women to overcome historical gender gaps in business performance.

Online searches point to fewer than 20 incubators and accelerators that target women as their primary clients. Most incubators remain gender-neutral, despite documented evidence that women entrepreneurs often face different challenges from their male counterparts, including limited access to capital, greater family responsibilities, lower self-confidence, and greater risk aversion.

Data and Methods

To answer my two primary research questions, I used a multi-stage, mixed methods approach. I collected original data through:

1. **In-depth interviews** with leaders of female-focused incubators and accelerators nationwide, as well as key figures working to promote women's entrepreneurship in the Triangle
2. **A survey of Triangle-area incubators and accelerators** on programmatic factors that may affect women entrepreneurs, including women's participation rates, the presence of women on the incubator or accelerator's leadership team, and the existence of female-focused programming.

Using these data, I performed a landscape analysis of the incubation and acceleration environment for women entrepreneurs in the Triangle through qualitative and basic quantitative analysis. I then developed best practices for female-focused business incubation by comparing emerging themes from interviews with the most recent best practice literature on gender-neutral incubation.

Findings

1. **The incubation landscape in the Triangle reflects national problems.** (1) Incubators target male-dominated industries, (2) women are underrepresented in incubator cohorts, and (3) no incubators specifically target women entrepreneurs in their program content or program design.

2. **Interviews suggest that there is demand for female-focused entrepreneurial programming** in the Triangle, despite the lack of any female-focused incubators or accelerators currently in existence. Female-focused initiatives on a more limited scale—including e51, Soar, and *Triangle Startup Weekend – Women*—have seen strong turnout at their events and interest in other opportunities they offer. In addition, the Durham-based Council for Entrepreneurial Development (CED) has seen the supply of women looking to mentor other women grow with time. Participation in these programs signals not only demand, but also an infrastructure of networks and support that future organizations can leverage in expanding services for women entrepreneurs.

3. **To best serve women entrepreneurs, female-focused incubators and co-working spaces are employing the following best practices:**
    - Creating strong female-to-female mentoring networks
    - Designing their curricula to build confidence among entrepreneurs
    - Making requirements more flexible to accommodate women with family responsibilities

- Creating a welcoming, female-friendly culture through the design of their space and planning of events

4. **There remains debate within the entrepreneur community about the benefits of single-gender incubation.** However, there may be room for agreement on two points: (1) women who self-select into a single-gender environment—and not all women—may find benefit. In some cases, these women likely would not participate in a male-dominated incubator. (2) Female-focused incubators are not exclusionary in the way some may assume. Instead, many are welcoming founding teams that include men, and striving to build connections with mentors, clients, and investors of both genders beyond the incubator's walls.

Recommendations

Given the lack of female-focused programming and low participation of women in Triangle-area incubators and accelerators, I recommend that the Women's Business Center of North Carolina move forward on the path to pursuing a female-focused business incubator by conducting a feasibility study. Interviews with leaders in the Triangle entrepreneur community suggest that local women entrepreneurs are eager for more female-focused programming, and that networks are in place that would facilitate recruiting and mobilizing women to participate in a new incubator. However, my research is limited in scope, and the lack of interviews and focus groups with large numbers of women entrepreneurs in the Triangle leaves several questions of demand and financial feasibility still on the table.

A feasibility study should be conducted by an independent third party and address the following four components:

1. **The market,** including potential clients, the services they will need, and whether the incubator can obtain those services. My data suggest that women entrepreneurs need more support for non-tech industries and an incubation environment focused on flexibility, mentoring, and confidence-building. However, a feasibility study may reveal that women are more willing to pay for a female-friendly environment focused on technology and science, given the male-dominated culture in these industries.

2. **Buy-in from the community,** including whether a potential incubator has champions with the necessary skills and passion to make the program a reality. My interviews suggest that there are existing organizations—such as e51 and HQ Raleigh—that would likely support the concept of a female-focused incubator. It remains to be seen, however, whether leaders of these organizations would have the time, capacity, or interest to partner with the WBC of NC as champions of a new incubator in the Triangle.

3. **Financial feasibility**, including an estimate of how many rent-paying companies would be needed to create a stable revenue stream for the incubator. A feasibility study may reveal that women entrepreneurs value flexibility over paying to work from a co-working space. If this is the case, a lower cost "incubator without walls" model may be more appropriate.

4. **Availability of real estate suitable for an incubator.** A successful incubator needs not only a building to house its clients and programs, but a building of appropriate size, location,

configuration, and cost. My research does not address available real estate in Durham, but does suggest that pursuing donated space from a city government or a local university may be the most practical route to establishing a new incubation facility.

Starting an incubator involves extensive work, including building a plan for financial sustainability, securing funding, procuring space, building a board of advisors, hiring staff, recruiting entrepreneurs, and providing trainings and mentorship that add value to young, growing companies. The WBC of NC should not undertake this work unless a feasibility study provides clear evidence that the venture will pay off.

If a feasibility study reveals that the Triangle market will support a female-focused incubator, the WBC of NC should employ the best practices exposed in this report to maximize its success among women entrepreneurs (see **Findings, pg. 14**). By designing an incubator to address the unique challenges faced by women entrepreneurs, the WBC of NC can further accelerate the growth of women-owned companies in the Triangle.

I. POLICY QUESTIONS

Is there need for a business incubator targeted at women entrepreneurs in the Triangle area of North Carolina? If so, how should the Women's Business Center of North Carolina design such an incubator to best serve women entrepreneurs?

II. CLIENT BACKGROUND

To accelerate the growth of women-owned businesses in North Carolina, the Women's Business Center of North Carolina (WBC of NC) is considering designing a female-focused business incubator in the Triangle. The WBC of NC is a Durham-based nonprofit that helps women start and grow businesses throughout the state, and serves as one of around 100 women's business centers nationwide, funded in part by grants from the U.S. Small Business Administration (SBA).

Currently, the WBC of NC provides women entrepreneurs with free services on an ad-hoc basis out of its Durham headquarters and training sessions conducted statewide. These services include one-on-one counseling, lender referrals, networking opportunities, and training classes on marketing, finance, and more. In 2013, the organization counselled 354 clients operating in a wide array of industries and conducted 136 training sessions, serving more than 4,300 participants. The WBC of NC reports that these clients created and retained 407 jobs throughout the state, realizing total annual sales of more than $49 million (Harris, 2014).

III. ISSUE BACKGROUND

Women-owned Business Performance in North Carolina

Although women-owned businesses represent a growing percentage of North Carolina's economy, women continue to be underrepresented in the field of entrepreneurship. As of 2007—the latest year for which U.S. Census data are available—the state contained 225,500 women-owned firms, representing 29 percent of all North Carolina businesses.[2] Women-owned firms had average revenues of $141,576—75 percent less than those of men-owned firms. Only 11.8 percent of North Carolina women-owned businesses had employees, compared to 22.2 percent of men-owned firms (U.S. Census Bureau, 2007). North Carolina's landscape of women-owned firms mirrors national trends, in terms of percentage of the overall business community, and relative revenue and employment numbers compared to men-owned businesses (National Women's Business Council, 2012). This gender gap in business ownership and business size suggests that women may not be sufficiently supported in their entrepreneurial efforts.

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[2] I define "woman-owned" as a woman or women having at least 51% or greater ownership of a company. The U.S. Small Business Administration divides enterprises into three gender categories: "woman-owned," "male-owned," and "equally male/female-owned." See ("Small Business Profile: North Carolina," 2013).

Business Incubation Overview

Government, non-profit, and private sector actors are increasingly trying to address this gap in performance by women-owned firms. Business incubators serve as a possible institution to employ in this effort. Incubators are independent organizations that aim to speed the growth of early-stage startup companies by providing technical assistance, mentoring, shared work space, and other services. As of 2012, more than 1,250 business incubators existed throughout the United States (National Business Incubation Association, 2014).

Although definitions of business incubation differ greatly among academics practitioners, this report will use the definition offered by the U.S. Economic Development Administration (EDA) in its 2011 review of incubation literature (Lewis, Harper-Anderson, and Molnar, 2011). By this definition, a business incubator:

- Targets "young, growing companies" (p. 15)
- Strives to accelerate the development of these companies, with the ultimate goal of producing firms that are "financially viable and freestanding" upon exiting the program (p. 15)
- Provides "management guidance, technical assistance, and consulting" to participating companies to achieve this goal (p. 15)
- Assists companies in obtaining capital to grow their operations (p.15)
- Has a selection and exit process for companies participating in the program (p. 12)
- Manages a multitenant facility, offering participating companies "rental space and flexible leases [and] shared basic business services" (p. 15)

Importantly, the final point above is not absolute. Many incubators have adopted a virtual—or "incubator without walls"—model, in which they support young companies without providing on-site workspace (Lewis, Harper-Anderson, and Molnar, 2011, p. 16). These incubators often have a central office for management and program coordination, but provide networking, mentoring, and other services online or through off-site meetings. For the purpose of this report, my use of "incubator" or "accelerator" (see definition below) assumes that the organization provides shared workspace, unless specified otherwise.

EDA researchers also note that "business accelerators" have grown from the business incubation model, but that no consistent definition exists for an accelerator. EDA definitions include either "(1) a late-stage incubation program, assisting entrepreneurial firms that are more mature and ready for external financing; or (2) a facility that houses a modified business incubation program designed for incubator graduates as they ease into the market" (Lewis, Harper-Anderson, and Molnar, 2011, p. 17). For a quick comparison chart outlining the typical differences between incubators and accelerators see **Appendix A**.

Importantly, both the EDA and the National Business Incubation Association (NBIA) note that the terms "business incubator" and "business accelerator" are often used interchangeably (Lewis, Harper-Anderson, and Molnar, 2011; National Business Incubation Association, 2014). Given that business accelerators employ incubation principles, and that no consistent definition exists for an accelerator, my use of the terms "business incubation program," "business incubator," and "incubator" should be assumed to include acceleration, as well. Occasionally, I will use the term "accelerator" to refer to an organization that has defined itself as such.

Incubation for Women Entrepreneurs

No concrete data exist on the participation of women entrepreneurs across the 1,000+ incubators in the United States. However, some research does suggest that many incubators have few female tenants and offer a "masculinized" incubation environment, despite having a gender-neutral official stance (Marlow & McAdam, 2012). In addition, although research on women's performance in business incubation is highly limited, some literature does suggest that business incubation may have greater benefits for women than for men. Using a longitudinal data set of around 950 gender-neutral business incubators in the United States, Amezcua and McKelvie (2011) found that "while in incubation, women-owned businesses experience[d] sales growth and employment growth levels that [were] 3.5 percent and 5 percent higher than men-owned incubated businesses" (p. 1). The authors suggest that incubators may therefore help women overcome historical gender gaps in business performance.

Very few incubators specifically target women entrepreneurs as their primary clients, despite documented evidence that women often face different challenges from their male counterparts in an entrepreneurial setting. Online searches point to fewer than 20 incubators and accelerators that target women as their primary clients [See **Appendix B**]. The National Business Incubation Association (NBIA), the leading trade organization for business incubators worldwide, reports that only three U.S. incubators in its database are "flagged as specifically serving women entrepreneurs" (Gulino, 2014), indicating a lack of industry knowledge about incubators targeting women.

Challenges for Women Entrepreneurs

Women often choose to start businesses for different reasons than men, and experience entrepreneurship differently, suggesting that women may benefit from entrepreneurial support programs that target their specific challenges. Women are more likely than men to start businesses out of a desire for flexibility to balance family and work, rather than for wealth creation (Brush, 1992; DeMartino & Barbato, 2003). Women are also starting businesses in different industries than men; as of 2007, nearly 50 percent of women-owned firms were concentrated in "other services," "health care and assistance," and "professional, scientific, and technical services" (National Women's Business Council 2012, p. 2). None of these industries ranks in the top ten in terms of average receipts per firm; "other services" ranks 19th, "health care and social assistance" ranks 16th, and "professional scientific, and technical services" ranks 12th (National Women's Business Council, 2012, p. 20). This distribution of women by industry has important implications in business incubation, as 37 percent of incubators focus on the technology sector, which is heavily male-dominated (National Business Incubation Association, 2014).

Once women start their business, factors including limited access to capital often influence their business growth. Evidence suggests that women start their businesses with fewer resources (Boden & Nucci, 2000), and struggle more than men to obtain debt financing (Coleman, 2000, 2007; Eddleston, Ladge, Mitteness, & Balachandra, 2014) and venture capital. From 2011 to 2013, companies with a woman CEO received less than 3 percent of the total venture capital dollars invested in the United States (Greene, Brush, Hart, & Saparito, 2001). In 2013, women made up only 6 percent of venture capital partners (Brush, Greene, Balachandra, & Davis, 2014), limiting women entrepreneurs' access to venture capital given that first-degree connections offer an important path into discussions with venture capitalists (Brush, Carter, Gatewood, Greene, & Hart, 2004)

Evidence also suggests that self-perception—or the "confidence gap," as it is currently described in the media—is a limiting factor for women entrepreneurs. On average, women believe themselves to be less capable of starting a business than men do (D. J. Kelley et al., 2014; Santos, Roomi, & Liñán, 2014). Women entrepreneurs express more risk aversion than men on average (Kepler & Shane, 2007), and have less diversity in their networks (Renzulli, Aldrich, & Moody, 2000)—factors that may influence entrepreneurial success.

IV. DATA AND METHODS

To answer my two primary research questions, I used a multi-stage, mixed methods approach. I collected original data through (1) in-depth interviews with leaders of female-focused incubators and accelerators nationwide, as well as key figures working to promote women's entrepreneurship in the Triangle; and (2) a survey of Triangle-area incubators and accelerators on programmatic and organizational factors that may affect women entrepreneurs.

Using these data, I (1) performed a landscape analysis of the incubation and acceleration environment for women entrepreneurs in the Triangle, using qualitative and basic quantitative analysis; and (2) developed best practices for female-focused business incubation by comparing emerging themes from interviews with the most recent best practice literature on gender-neutral incubation.

In-depth Interviews

From February through April 2015, I conducted in-depth interviews and background discussions with individuals inside and outside the Triangle area. Within the Triangle, I spoke with incubator leaders, women entrepreneurs with experience in incubation programs, and leaders of other local organizations supporting women's entrepreneurship or entrepreneurship in general. Beyond the Triangle, I interviewed founders or managers of incubators and co-working spaces that target women entrepreneurs nationally or in their local market.

On average, these discussions and interviews lasted 30 to 45 minutes, and were conducted either over the phone or in person, depending on the interviewee's location. Most interviews were recorded, with participants' consent. I took detailed notes for those discussions that were not recorded.

For my pool of Triangle-area contacts, I began by speaking with a few entrepreneurship leaders based out of American Underground's campuses in downtown Durham. I used a snowball sampling method, requesting that interviewees provide me with other recommended individuals to contact. While I originally intended to speak only with incubator leaders, it became clear that speaking with women entrepreneurs, leaders in co-working spaces, and other entrepreneurship experts would provide a more comprehensive picture of the landscape for women entrepreneurs in the Triangle. See **Table 1** for a list of interviewees in the Triangle.

Table 1: Interviewees in the Triangle Area, NC

Interviewee	Position	Organization	Org. Type*	Location
John Austin	Director	Groundwork Labs	Accelerator	Durham, NC
Lizzy Hazeltine	Venture Associate	The Startup Factory	Accelerator	Chapel Hill, NC
Adam Klein	Chief Strategist	American Underground	Shared working space with programming	Durham & Raleigh, NC
Heather McDougall	Co-Founder	E51	Networking/Mentoring Org. for Women Entrepreneurs	Triangle-wide
Joan Siefert Rose	President	Council for Entrepreneurial Development	Membership & Support Org. for Triangle entrepreneurs	Durham, NC
Jennifer Stanigar	PhD Candidate	NC State University	University	Raleigh, NC
Liz Tracy	Director of Community Engagement	HQ Raleigh	Shared working space with programming	Raleigh, NC
Sheryl Waddell	Co-Founder	E51	Networking/Mentoring Org. for Women Entrepreneurs	Triangle-wide
Lauren Whitehurst	Co-Founder	Soar	Mentoring Org. for High-growth, Female-led Startups	Durham, NC
Anonymous Female Founder 1	Co-founder & CEO	[Company A - name withheld]	Startup Company	Durham, NC
Anonymous Female Founder 2	Co-founder & CEO	[Company A - name withheld]	Startup Company	Durham, NC
Anonymous Female Founder 3	Founder	[Company B - name withheld]	Startup Company	Durham, NC

* Organization type determined by the organization, itself, or through online materials and/or interviews.

In selecting incubator leaders beyond the Triangle to interview, my initial list of interview targets was drawn from online searches, conversations with the U.S. Small Business Administration, and referrals from the National Business Incubation Association. I originally intended to interview only leaders of organizations self-defining as incubators, but soon found that the small number of female-focused incubators would translate to very few interviews. I therefore expanded to include organizations self-defining as accelerators and co-working spaces targeting women, given that programming in these organizations reflects business incubation principles. I again used a snowball sampling method, requesting that interviewees recommend other interview targets. See **Table 2** for a list of interviewees beyond the Triangle.

Table 2: Interviewees from Incubators/Accelerators/Co-working Spaces Targeted at Women

Interviewee	Position	Organization	Org. Type*	Location
Darrin Dixon	Director of Small Business Development	SUSLA Small, Women and Minority-Owned Business Incubator	Incubator	Bossier City, LA
Jennifer Gabler	Co-founder	The Refinery	Accelerator	Westport, CT
Felena Hanson	Founder	Hera Hub	Co-working Space with Programming	San Diego, CA
Mara Lewis	Managing Director	Upstart (Start Co.)	Accelerator	Memphis, TN
Amy Millman	Co-founder	Springboard Enterprises	Accelerator	Washington, DC
Lada Rasochova	Director	mystartupXX	Accelerator	San Diego, CA
Ann Saris	Executive Director/CEO	YWCA Wausau Business Incubator Program	Incubator	Wausau, WI
Julia Westfall	Owner	Hera Hub DC	Co-working Space with Programming	Washington, DC
Caleb Zigas	Executive Director	La Cocina Incubator	Incubator	San Francisco, CA

* Organization type determined by the organization, itself, or through online materials and/or interviews.

It is important to note that the organizations I interviewed differed widely in their industry focus and program models. Several organizations did not target a particular industry, while others focused on traditionally incubated industries like technology. All incubator and accelerator programs targeted startup companies, but in very different stages, from those still constructing business plans to those seeking outside investment within the next year. Although most incubators and accelerators interviewed do not invest in their participating companies, a few do invest, and in certain cases, take equity. These programmatic differences likely affect interviewees' opinions about the best support mechanisms for women entrepreneurs. However, given the small number of incubation programs targeting women across the United States, I decided not to further restrict my interviewee pool by specifying additional criteria.

Landscape Analysis of Triangle-Area Incubators

An understanding of the incubator landscape in the Triangle is useful in identifying potential gaps in support for women entrepreneurs. I therefore collected key information on incubators and accelerators currently operating in Raleigh, Durham, or Chapel Hill, including the market sector they serve, what services they offer, and the extent to which women participate in their programs. I compiled my list of organizations through online searches and discussions with the Council for Entrepreneurial Development and the Greater Durham Chamber of Commerce.

I collected information about incubators and accelerators through online research, emails with incubator managers, and brief phone conversations with incubator managers. My questions addressed the following topics:

- Type of program (incubator/accelerator/other)
- Industry targeted
- Services offered to entrepreneurs
- Length of program
- Existence of a residency program, in which companies operate out of shared space
- Cost of program
- Whether the organization invests in and/or takes equity in participating companies
- Percent of participating companies with a female founder or co-founder
- Presence of women in the organization's leadership team
- Existence of female-focused programming

The final three criteria are inspired by research plans shared by the National Women's Business Council (NWBC), which is currently conducting a national survey of incubators and accelerators. The NWBC plans to assess whether an incubator or accelerator is "women-friendly" based on the percentage of women-led companies in a cohort, women in leadership, women on advisory boards, and female-focused programming (E. Kelley, 2015). I simplified these criteria to exclude advisory board considerations, given that incubatees likely have little contact with advisory board members.

Assessment of Best Practices for Incubating Women Entrepreneurs

To provide guidance to the Women's Business Center of North Carolina on incubator design—should the organization decide to launch a female-focused incubator—I compared interview data with the most recent comprehensive literature review of best practices from the U.S. Economic Development Administration (EDA) (Lewis, Harper-Anderson, and Molnar, 2011). Using interview transcripts and my own notes, I manually post-coded interview texts to identify key themes, focusing on those relevant to my policy questions. I entered interviewee responses into a matrix by theme, and compared responses, drawing out areas of agreement, and noting when interviewees' opinions differed greatly from those of others. From this matrix, I synthesized areas of agreement, and pulled quotes to illustrate those best practices, as well as any noteworthy counter viewpoints.

V. FINDINGS

The Case for Female-focused Incubation

Interviews confirmed suggestions in the academic literature that women entrepreneurs face challenges different from those faced by their male counterparts, and that the current male-dominated incubator landscape does not ideally serve some women entrepreneurs. Regarding general challenges for women entrepreneurs, interviewees most frequently mentioned:

- **Limited access to capital**
  Interviewees most frequently cited two factors contributing to women entrepreneurs' difficulty in obtaining capital: (1) nearly all venture capitalists are male, and (2) the industries in which women are starting businesses are less attractive to investors. Interviewees mentioned that women struggle to understand how to "work with male investors" in the male-dominated venture capital field (Liz Tracy, HQ Raleigh), and face challenges—like their male counterparts— "navigating the complex processes required to obtain outside investment" (Lizzy Hazeltine, The Startup Factory). In addition, interviewees suggested that women are more likely than men to start companies in service or lifestyle industries, which might "do well in their region…but not get a 10-times return over the next five years" (Sheryl Waddell, E51), making these companies less attractive to investors.

- **Family responsibilities**
  Interviewees regularly mentioned women's need to balance entrepreneurial ambitions with family responsibilities, including caring for children and elderly parents. This challenge makes make it difficult for women to attend entrepreneurship events, enroll in incubation programs, or relocate their business to an incubator facility. As Felena Hanson, founder of Hera Hub—the franchisor of female-focused co-working spaces—explains, "Women are managing a thousand things at a time, so having a singular focus for a period of time is challenging for a lot of women. There are lots of programs where you move somewhere for six months to develop an app, but I don't know a lot of women who are able to do that."

- **Lack of role models**
  Interviewees working in technology and science fields were particularly adamant about the challenge women face in not having a large pool of female role models, who can share insights from their own entrepreneurial experience. Mara Lewis, managing director of Upstart, Start Co.'s female-focused accelerator in Memphis, explains, "There are male role models in the tech space everywhere you look. [Men] don't have to filter them out and find them. For women, it's much harder to identify the big women in tech who can be thought leaders, and who we can look up to."

- **The confidence gap**
  Women's lower self-confidence relative to men was a common theme in my interviews. Interviewees suggested that women are less prone to brag about themselves, especially when pitching to potential investors. Women's hesitation, inability, or lack of desire to brag about

themselves leaves investors questioning their skill in leading a team and their ability to yield big returns. As a result, investors may require that female CEOs be replaced, or simply withhold investment altogether. Amy Millman, president of Springboard Enterprises in Washington, DC, says:

> *In this environment, you have to lead with your expertise and your credibility, and if women can't do that in those environments, then how do investors know that they want to put a ton of money into these companies? How do investors know you're going to be able to execute? They don't.*

Interviewees also mentioned risk aversion and perfectionism as traits that are more common among women entrepreneurs than among their male counterparts. Interviewees' responses suggest that women are more reserved in sharing their business ideas, and less willing to take risks in starting and growing their businesses. A "perfectionist ideal" makes it difficult for some women entrepreneurs to speak about their product or service before they deem it to be perfect (Mara Lewis, Upstart). One female entrepreneur suggests that the process of sharing an early, imperfect idea can be "really uncomfortable," and that "you never feel like you're necessarily ready to discuss with prospective clients." This hesitation among women to discuss an early-stage, imperfect idea may have negative implications for some entrepreneurs, who need to constantly refine their product based on customer feedback.

Furthermore, interviewees confirmed that the disproportionately low presence of women and a masculinized culture in today's gender-neutral incubation programs may discourage women from participating. Several interviewees mentioned that women feel like "outsiders" (Liz Tracy, HQ Raleigh) or feel "intimidated"(Heather McDougall, e51) when attending events or programs in which they are one of only a few women. In addition, several interviewees suggested that today's incubators often have a "frat-like atmosphere" (Jennifer Gabler, The Refinery) or "bro" culture (Anonymous Entrepreneur). A comment from one woman entrepreneur best illustrates this culture. She explains that she was the only woman in her accelerator cohort, and her sense of inclusion changed with time:

> *At first, I didn't mind it – they took me under their wing. But, over time, I found that I was being teased because I was so social-mission driven. Towards the end, I rarely worked there.*

She further describes how men in her cohort would often discuss "women, or dating, or non-work-related things that would make me feel uncomfortable speaking up or participating in the social conversations, which should be a part of co-working." These discussions conveyed a culture that said, "We're a bunch of bros." As a result, she "put in headphones and worked," ultimately "defeat[ing] the purpose of a co-working space."

Existing Business Incubator/Accelerator Landscape in the Triangle

Eight incubators and accelerators currently operate in the Raleigh-Durham-Chapel Hill area, with different models, services offered, and degrees of female participation. See **Appendix C** for a complete list of these organizations, including details about their programs and female participation rates.

Table 3: Characteristics of Triangle Incubators and Accelerators

Org. Name	Org. Type*	Industry	Location	% Companies with Women Founders/ Co-founders	Women in Leadership	Female-Focused Programming
The Cookery	Incubator	Food/Kitchen	Durham	---	✓	⊘
First Flight Venture Center	Incubator	Tech	Research Triangle Park	---	---	⊘
Groundwork Labs	Accelerator	Tech	Durham	27%	⊘	⊘
Hamner Institutes for Health Sciences - Biosciences Accelerator	Accelerator	Biosciences	Research Triangle Park	25-33% (estimated)	⊘	⊘
Launch Chapel Hill	Accelerator	Neutral	Chapel Hill	---	✓	⊘
NC State Univ. Technology Incubator	Incubator	Tech	Raleigh	8%	✓	⊘
ThinkHouse Venture Accelerator	Accelerator	Neutral	Raleigh	12%	✓	⊘
The Startup Factory	Accelerator	Software	Durham	32%	✓	⊘

*   Organization type determined by the organization, itself, or through interviews or online materials.
---   Data not available, due either to unsuccessful attempts to contact the organization or the organization not tracking data.
✓   Criterion met
⊘   Criterion not met

The incubation landscape in the Triangle reflects national problems, as (1) incubators target male-dominated industries, (2) women are underrepresented in incubator cohorts, and (3) no incubators specifically target women entrepreneurs in their program content or program design.

Of the eight incubators and accelerators identified in this study, only Launch Chapel Hill and ThinkHouse are industry-neutral. The remaining organizations target a particular industry, with five of the six organizations serving technology or science industries, which traditionally have low representation of women-owned firms.[3] The incubation landscape in the Triangle therefore underserves the industries in which women entrepreneurs are most highly represented. This reality is not surprising, as most of these organizations focus on scalable businesses, which—as my interviews confirmed—are more likely to be found in the tech sector than in service or lifestyle industries.

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[3] In North Carolina, 2007 U.S. Census data show that within the North American Industrial Classification System (NAICS) codes for these industries—51 (Information) and 54 (Professional, Scientific, and Technical Services)—women own 27 and 28 percent of businesses, respectively (U.S. Census Bureau, 2007).

In addition, interview data suggest that incubation programs target industries in which investors have expressed interest. As investors narrow on the tech sector, therefore, incubators and accelerators follow suit. Sheryl Waddell, co-founder of e51, a women's networking and peer mentoring organization in the Triangle, explains that lifestyle companies are "probably less attractive to investors. And that's probably what makes them less attractive to an incubator or accelerator. I think they could be growth companies, but I don't know about high growth, and that's where the differentiator may be, especially from an investor standpoint."

Within incubators and accelerators in the Triangle, the range of companies with female founders or co-founders ranges from 8 percent (NC State University Technology Incubator) to an estimated 33 percent (Biosciences Accelerator at the Hamner Institutes for Health Sciences). Given that incubators and accelerators play a key role in fostering network connections among entrepreneurs and mentors, investors, and potential customers, increasing women's participation in these existing incubators and accelerators may have positive outcomes in terms of gender disparities in tech and science entrepreneurship overall. Increased recruitment of female entrepreneurs—potentially through partnerships with other Triangle-area organizations (see "Demand for Female-focused Programming in the Triangle" below)—may yield higher rates of female applicants.

Five of eight incubators and accelerators have at least one woman on their leadership team. Corporate research suggests that when an organization's leadership team is diverse, the norms cascading down through the organization are more likely to be "wide-ranging, balanced," and non-exclusionary (Anika K. Warren, 2009, p. 9). Incubators and accelerators without women on their leadership team may therefore be unintentionally contributing to an organizational culture that is not welcoming to women, or possibly dissuading potential female applicants who assume this to be the case. Given that the most important factor to making an incubator feel welcoming to women may simply be having more female participants, all-male incubator management teams face a difficult situation of trying to figure out how to initiate that positive feedback loop.

Importantly, no incubators or accelerators in the Triangle offer female-focused programming, instead choosing to offer exclusively gender-neutral programming. Nonetheless, ties to women entrepreneur-focused organizations may facilitate incubatees' participation in such programming outside of the incubator or accelerator. For example, Groundwork Labs Director John Austin cofounded Soar, a Triangle-based mentoring initiative for women entrepreneurs to help close the funding gap in high-growth industries. Although I cannot conclude that Groundwork Labs incubatees are more likely to participate in Soar events or programs than they would be otherwise, it is reasonable to assume they receive greater exposure to Soar's marketing efforts than women entrepreneurs outside the accelerator.

Demand for Female-focused Programming in the Triangle

Although no female-focused incubators or accelerators exist in the Triangle, interviews with other female-focused organizations suggest that there is demand for female-focused entrepreneurial programming. These initiatives—e51, Soar, and the Triangle Startup Weekend for Women—have seen strong turnout at their events and interest in the other opportunities they offer. In addition, the Durham-based Council for Entrepreneurial Development (CED) has seen the supply of women looking to mentor other women grow with time.

Participation in these programs signals not only demand, but also an infrastructure of networks and support that future organizations can leverage in expanding services for women entrepreneurs. Felena Hanson, Hera Hub founder, explains that this infrastructure is important when assessing whether the market can support another female-focused business support organization. She says:

> *A lot of it has to do with the demographics of the area, and the current support. So, is there a strong local chapter of organizations like NAWBO [the National Association of Women Business Owners]? Are there strong industry groups for women? Is there a strong rally for female entrepreneurship in that city already, both private and public groups? Because those are organizations that are paving the way, so to speak.*

Hanson cites other women's organizations as a precondition for deciding to launch a Hera Hub franchise in a new location. Similarly, the WBC of NC should consider existing female-focused business networks and channels through which it can recruit incubator participants, mentors, service providers, funders, or partners.

See subsequent descriptions of these initiatives, and interviewees' perspectives on demand for female-focused entrepreneurial programming.

- **e51**
  Founded by Heather McDougall, executive director of Leadership ExCHANGE, and Sheryl Waddell, Blackstone Entrepreneurs Network Program Director, e51 seeks to create a robust and visible ecosystem for women entrepreneurs of all industries throughout the Triangle. E51 currently hosts periodic Coffee Connections with structured programming, in which women share knowledge and learn from each other's experiences. In addition, e51 served on the planning board for *Triangle Startup Weekend – Women* and partners with North Carolina State University on an annual Women's Innovation Conference. E51 is currently designing a Women and Innovation 2-week program for college students in partnership with Leadership exCHANGE and HQ Raleigh.

  Prior to forming the organization, McDougall and Waddell conducted focus groups with around thirty women of different ages, career stage, and industries. These participants included students, professors, venture capitalists, and business owners. McDougall describes the response from participants:

  > *We were very pleasantly surprised when the majority—a very overwhelming majority—had the sentiment that, yes, there are plenty of [entrepreneurship] events or programs going on, but they specifically wanted things that were catered to women. They wanted to be in a room with more women, and they felt that that space—bringing women together—was essential to help build that community. They felt that there is a difference between generalized programming and programming for women.*

  After identifying perceived demand for female-focused programming, e51 has, in fact, seen strong attendance at its networking events. Waddell explains:

  > *We've gotten such an overwhelming response from the women in the community, as far as being involved, wanting to be involved, coming to the meetings. We had a*

snowstorm last year, and we still had people showing up, and that's very rare in
North Carolina.

McDougall mirrored this sentiment in her interview, further suggesting that "at a lot of the events, there are different people showing up… It's not just the same group of people coming every time." Attendance by new individuals at each of e51's events suggests that there is a large pool of women entrepreneurs with interest in female-focused programming.

- **Soar**
Launched in 2014 as part of Google's #40Forward initiative, Soar is an outreach and deep-mentoring organization, working to "close the proven funding gap facing female entrepreneurs" ("Soar: Mission," 2015). Soar is industry-neutral but focuses on scalable businesses, targeting companies that are preparing to seek funding in the next twelve months.

  Soar's founding team includes John Austin (Director, Groundwork Labs), Kimberly Jenkins (early team member at Microsoft), Adam Klein (Chief Strategist, American Underground), Lauren Whitehurst (Founder, Sidekick Consulting), and Vickie Gibbs (General Manager, Albright Digital). With leaders of a key accelerator (Groundwork Labs) and co-working space (American Underground) on the founding team, it is evident that Soar has strong ties to other entrepreneurship support organizations in the Triangle. This helps create a pipeline for female participants currently in those spaces to also apply to Soar's program or attend its events. Soar received 20 applications for its first cohort of 4 mentee companies, and plans to expand its program to support 8 mentee companies in 2015.

- **Triangle Startup Weekend – Women**
Hosted by the co-working space, HQ Raleigh, *Triangle Startup Weekend – Women* took place from October 10th through 12th, 2014. While most gender-neutral Startup Weekends report only 20-percent female attendance ("Triangle Startup Weekend - Women," 2014), 74 percent of participants during the female-focused weekend were female. Liz Tracy, Director of Community Engagement at HQ Raleigh, describes the participants:

  There were about 75 people who participated. It was a really diverse group as well,
  with a lot of brand new faces, which was a communicator of success when you're
  trying to get new faces in the crowd. A lot of Startup Weekends are often the same
  people over and over again.

- **Council for Entrepreneurial Development (CED) – Venture Mentoring Service**
Established in 1984, CED is one of the longest-standing organizations aimed at supporting Triangle-area entrepreneurs. CED's Venture Mentoring Service provides entrepreneurs with access to a team of three to four mentors with skill sets that match entrepreneurs' needs, all at no cost. Joan Siefert Rose, President of CED, reports that although the program is gender neutral, CED has seen "a lot of interest from women to be on the mentor side," and around one third of mentors are female. In addition, Siefert Rose reports that many "women who are mentors will say they're particularly interested in helping companies that are led by women." This suggests that there is a supply of women with business experience in the Triangle who are not only looking to give back to women entrepreneurs, but who are also motivated enough that they have already volunteered for a mentoring program.

High female attendance and a presence of fresh faces at e51 events and *Triangle Startup Weekend – Women* indicate that there is notable demand among women for gender-specific peer networking, peer mentoring, and guidance on the early stages of business development. Soar's application rate suggests that, additionally, there is demand among women for deep mentoring from experts in a gender-specific setting and guidance on accessing venture capital. Finally, anecdotes from Heather McDougall's and Sheryl Waddell's focus groups suggest that women entrepreneurs are vocal about their desire for female-focused programming.

Although these organizations have emerged and grown in recent years, it appears that more coordination is necessary to connect these networks of women entrepreneurs, and specifically to foster female-to-female mentoring. Jennifer Stanigar, a North Carolina State University Ph.D. candidate researching mentoring within entrepreneurship, reports:

> *We need to organize and try to surface the issues [women face] and talk about them and find ways—innovative and collaborative ways—to work together, because everybody benefits... There's no one single mentoring community for women entrepreneurs in the Triangle.*

Best Practices for Incubating Women-Led Companies

Should the Women's Business Center of North Carolina decide to launch a business incubator targeted at women entrepreneurs, the organization should employ incubation best practices, targeted to best serve women entrepreneurs. **Appendix D** outlines best practices for gender-neutral incubation. See below for how these best practices may be modified for a female-specific environment.

(1) Mentoring

Incubator and accelerator leaders consistently stressed that the most important aspect of their programming involved a network of female mentors, who could provide women entrepreneurs with guidance, access to their networks, and emotional support. Most incubators and accelerators I interviewed had a mentoring component, which could consist of mentoring from seasoned entrepreneurs, or from one's peers.

Several interviewees suggested that mentoring plays a more important role for women entrepreneurs than for their male counterparts, both in terms of the benefits it delivers, and the entrepreneurs' willingness to be mentored and serve as mentors. Jennifer Gabler, co-founder of The Refinery, an industry-neutral accelerator operating in Westport, Connecticut, explains:

> *I think women accept mentorship more readily than men, and I think they're open to it, and I think they're very open to peer structure. That's a difference between men and women. The companies in our first cohort of 9 companies, and these current 10, created really strong bonds with their peers, especially if they were, or are, in other industries.*

This perceived openness may come from women entrepreneurs' desire to connect with potential role models within their industry or in the startup space, in general. Several interviewees mentioned a desire to provide their entrepreneurs with access to role models as a reason for facilitating mentoring programs. For example, Mara Lewis, Managing Director of Start Co.'s Upstart Accelerator in Memphis, says:

> *I line up a lot of role models—people they can look up to. I think that's a very defining quality, aside from the curriculum. It's that we help women understand that there are other women who they can aspire to and look up to, and see what road they've gone down… A guy, he can look anywhere. There are male role models in the tech space everywhere you look.*

Lada Rasochova, Director of the mystartupXX accelerator, which operates as part of the University of California San Diego, confirms this sentiment. When asked about the most effective element of her programming, she states:

> *Mentorship, definitely. Our support network and mentorship. Specifically when you are a woman, there are no role models around you pretty much… You have nowhere to go and ask for advice.*

In this way, female-to-female mentorship plays an important role in instilling confidence in women entrepreneurs, who otherwise might not see many successful women at the head of companies.

Mentoring programs among interviewed incubators and accelerators took different forms. For example, The Refinery (Westport, CT) provides each company with a team of three to four mentors—both female and male—who operate under a lead mentor, who curates feedback. In this way, the mentors provide cohesive feedback to the startup, rather than several differing opinions. The Refinery therefore helps its entrepreneurs avoid what co-founder Janis Collins terms "shiny object syndrome," in which entrepreneurs follow each new piece of advice they get, only to end up in confusion. In addition to providing a network of people to mentor entrepreneurs on the technical and financial aspects of their business, mystartupXX (San Diego, CA) assigns each female company founder with a personal mentor, who is always female.

(2) Building Confidence

The confidence gap between female and male entrepreneurs has important implications for incubator and accelerator programming. Interviews suggest that female-focused programs can help address this gap through program design and content. Start Co. (Memphis, TN) operates three accelerators: one gender-neutral accelerator, one focused on social enterprises, and one for women-led companies. The female-focused accelerator, Upstart, offers the same general training as the other two accelerators, but with a major difference in the delivery of content. Mara Lewis explores how Lean Startup methodology,[4] a widely adopted curriculum among accelerators, fails to support women:

> *[The Lean methodology] was made by boys for boys, and it has a very masculine underlying tone in how the curriculum is executed. In Week 1, you pummel founders with mentors, and conflicting advice and insight. You make them question themselves and their ideas. You break them down so that they're open and receptive to feedback and changing and pivoting and adapting their model. That's a very effective way to get the guys to admit that maybe they don't have perfect product-market fit.*

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[4] For more information on the Lean Startup methodology, see "The Lean Startup | Methodology," 2015.

If you do that to women, you've destroyed them for the rest of the accelerator. They're already coming into the program feeling open and receptive to feedback... If you go at them and pummel them with all this criticism, they basically go into a cave and never come out for the rest of the program.

Lewis continues to discuss how Upstart has altered its curriculum to help women explore their product-market fit, while continuing to build, rather than break down, their confidence. Upstart's model relies on individual exploration of the market by the entrepreneurs, who then return to discuss what they've learned with mentors and incubator management. Lewis discusses:

We let them find their own holes. We give them the tools they need to come to their own hypotheses about whether they have product-market fit. We're not there to break them down. We're there to support them and build them back up if they do get broken down, so it's a very different support system.

Springboard Enterprises (Washington, DC) also adjusts its programming to build confidence among its participants. Rather than focusing most of the accelerator on developing a strong business concept, Springboard instead prioritizes human capital development, in terms of building the confidence and competencies of its participants. Through an intense mentoring network, Amy Millman explains, Springboard participants receive coaching and guidance on how to grow their own entrepreneurial ability, and speak confidently about themselves before potential investors, clients, and other stakeholders. Millman says:

Our mission was to build a network of experts who are women, as opposed to focusing only on their businesses, or how we can invest in and create scalable businesses. We feel that you can go out through the women and they will be successful.

Building on Upstart and Springboard's models, incubators and accelerators may consider including more programming and mentoring opportunities related to coaching participants on self-confidence and outwardly confident presentation skills.

(3) Providing Flexible Programming and/or Space

Incubators and accelerators traditionally involve a business residency program, in which companies relocate to a shared work space, and operate out of that space for the entirety of the program. My interviews suggest that the residency model may discourage female participation in incubators and accelerators, as women carry a greater burden of family and home responsibilities than men, on average (Aldrich & Cliff, 2003). Jennifer Gabler of The Refinery highlights the gap between the current incubator/accelerator culture and women's needs:

I think forcing women to come to a co-working space – that's a very hip, millennial thing, having a big frat room where everyone works together in a co-working space. It's great for people who don't have other responsibilities, but a lot of our women are 40, 50, and have family responsibilities. They don't want to be forced to take office space or show up every day. That's part of the reason they're doing their own business.

Amy Millman, of Springboard Enterprises, confirms this sentiment, suggesting that she has seen programs with "in residence" requirements only work for women who were "very, very young and

didn't have any responsibilities." For Ann Saris, Executive Director and CEO of the YWCA Wausau (WI) Business Incubator, women entrepreneurs with busy outside schedules means she has difficulties bringing her entrepreneurs together all at one time:

> For most of them, their schedules really vary, and most do have a day job or other responsibilities. We tried getting them together to meet on a regular basis, and that was just pretty much impossible.

Female-focused incubators can counter a lack of flexibility in typical incubators through the design of their programs and space. To boost female participation, and accommodate women's responsibilities outside of the startup space, female-focused incubators and accelerators have developed innovative models for participation. The YWCA Wausau Business Incubator moderates an online forum, in which participants can seek feedback from the group about struggles they are facing. The Refinery (Westport, CT) holds structured workshops each Wednesday at a local library, rather than requiring companies to operate out of shared office space. Springboard Enterprises delivers the majority of its programming and support virtually, in order to facilitate women participating across the United States, as well as in other countries. Springboard requires its participants to be present for a few in-person sessions, including the initial interview for admission to the accelerator, a 2-day boot camp session, and scheduled presentations before investors and corporate officials.

Flexibility can be encouraged through the design of space and event timing, as well. American Underground has introduced a nursing room into one of its co-working campuses in Durham, making it possible for new mothers to participate. In addition, American Underground has altered the time of events to accommodate working parents. Adam Klein, Chief Strategist at American Underground, explains:

> We're trying to focus on structural barriers for women who want to start a company. We want them to feel like they're coming into a community and space that supports their whole life, not just their life as a businesswoman… We've tried to move more of our events to the daytime. All of our Soar events year-round begin at 2, 3, 4 o'clock in the afternoon, so that people can wrap up by 5 or 5:30 to be home with their families.

Klein emphasizes that American Underground's focus on removing structural barriers to entry have helped increase the percentage of female-led teams in its space from 7 percent at the beginning of 2014 to 23 percent by the end of the year.

Finally, providing convenient or inexpensive childcare can make it possible for women with children to participate in programs. Equita, a female-focused accelerator in San Francisco, provides childcare on-site at its accelerator facility.[5] To boost participation at *Triangle Startup Weekend – Women*, organizers partnered with a nearby children's museum to offer free passes to children and their caretakers. Liz Tracy, of HQ Raleigh, reports that women were able to send their children off with a family member or friend for the day, and concentrate on Startup Weekend activities.

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[5] I was not able to interview a representative from Equita for this report. For more information about the Equita accelerator, see "Equita Accelerator, Inc. | Advancing Women in Technology," 2015.

(4) Defining a Welcoming Culture

Finally, to avoid a "frat-like" atmosphere, an incubator might consider aesthetics in the design of its space, as well as the resources provided at its events. Julia Westfall, owner of the Hera Hub Washington, DC franchise, describes the Hera Hub aesthetic:

> *I think it's important to create an environment that's very professional, but also is not like every other co-working space that's out there. Our brand is spa-inspired, and we've created a calm, professional, and beautiful space where you can come, relax, and focus.*

Westfall goes on to describe the elements that will be present in the upcoming Washington, DC Hera Hub co-working facility:

> *Our space will have fountains and candles—those are two key elements of our brand and will make our space more appealing to women. The fountains create a calming sound and also help to mask noise in the co-working area. The candles will also add soft, natural light to the professional work environment we are creating.*

Hera Hub's co-working environment stands in contrast to traditional incubators, accelerators, and co-working spaces. Importantly, Westfall notes that this environment "appeals to some and not others." Hera Hub has seen sufficient demand to expand to four facilities, but not all women entrepreneurs will be drawn to such an aesthetic. Westfall's description, however, highlights the opportunity to tailor a space to attract a female clientele.

Triangle-area co-working spaces American Underground and HQ Raleigh have taken steps at their events to make the atmosphere more welcoming to women. American Underground now serves wine at its events, alongside beer, and HQ Raleigh makes a point to hire women-led catering companies when possible. Liz Tracy of HQ Raleigh speaks about the resources the organization brought in for *Triangle Startup Weekend – Women*:

> *All our meals were from female companies—female-led food companies or beverage companies. I think women appreciate those details and appreciate you being conscientious. We had a really great response from that.*

Beyond simply bringing in female speakers for events, incubators can signal support for women entrepreneurs through food, beverage, and other resources provided in their space.

Open for Debate: Is a Female-Focused Environment Better?

Interviews revealed several contrasting views on the value of incubation in a primarily single-gender setting. Critics of single-gender incubation were tied to gender-neutral incubation and business support programs. Proponents of single-gender incubation were more likely to be leaders of female-focused incubators or networks. In addition, several of the women who supported single-gender incubation had been in all-female school environments at some point in their lives. All these experiences likely shaped interviewees' opinions, making it difficult to draw objective conclusions from the debate.

Opposing viewpoints are explored below.

Arguments against female-focused incubation

Proponents of mixed-gender incubators highlight that the business world comprises both men and women, and that building a single-gender network restricts entrepreneurs' potential contacts and ability to grow their business after exiting the incubator. John Austin, Director of Groundwork Labs and co-founder of Soar, summarizes this viewpoint:

> *You can't build most companies in a cocoon of only women or only men.*

Furthermore, several female interviewees expressed dissatisfaction with the idea of receiving special treatment simply because they were women, as this would raise questions about their abilities as entrepreneurs. Lauren Whitehurst discusses the philosophy of Soar's founding team, as well as experiences in her own career:

> *None of us were interested in forming an organization to raise women up because they were women. I've never wanted to be pushed forward because of my gender. I wanted to be pushed forward because of my abilities and my ideas.*

One female entrepreneur, currently participating in a gender-neutral acceleration program with her female co-founder, expressed a similar desire to not be singled out:

> *I wonder how you can address [women's] challenges without making females feel different. We are females, and I'm a minority – had they treated us differently, it would have made me uncomfortable. I want to be treated as an equal… You never want to be singled out in a group, and made to feel different from the rest of the group.*

John Austin (Groundwork Labs) further discusses the possibility that a women-only incubator presents the risk of others stigmatizing incubator participants:

> *I think there could be a stigma associated with a women-only incubator. People could question: 'Are you choosing a women-only incubator because you couldn't get into a "regular" accelerator or incubator?*

Arguments for female-focused incubation

By contrast, leaders of female-focused incubators and supporters of single-gender incubation expressed that they are not "singling out" women, but instead allowing women to experience incubation alongside others who share similar experiences and interests:

> *This is just one thing [our entrepreneurs] are engaged with. It's another way for them to explore new relationships that will help them with their business or their careers or whatever. We don't expect this to be the only thing they're involved with, and we like to form a pretty big tent around Springboard. Being female is one asset that you have, and it can help.*
> – Amy Millman, Springboard Enterprises

> *There are men everywhere. Even if you have a small cluster of women, at the end of the day, you're not isolated. You're surrounded.*
> – Mara Lewis, Upstart Accelerator

Proponents of single-gender networks also stressed the confidence and comfort that some women can find in a space that is primarily female, rather than the traditional male entrepreneurial space. Examples of this argument include:

> *We're not feminists. We identify with the fact that women communicate differently; their needs are different. In starting a business, every aspect of the decisions that you make are critical, so if you are feeling more comfortable in one environment over another to share ideas, for example, or to open up in order to get feedback, that's really critical.*
> – Sheryl Waddell, e51

> *It has to do with confidence—being more willing to go out on a limb, maybe look foolish, maybe fall down, maybe make a mistake, or ask what they might think is a stupid question. You know, that single-gendered environment just facilitates that. The women, I think, in general are more willing to take a risk in a group of women.*
> – Ann Saris, YWCA Wausau Business Incubator Program

Finding a balance

Although these two camps appear heavily opposed, it is important to remember that entrepreneurs voluntarily apply to incubator programs of their choice. Some women entrepreneurs may be attracted to an all-female or primarily female environment, and in the absence of such an environment, may not participate in an incubator at all. Others may prefer a mixed-gender or primarily male environment, and would not be deterred by the gender breakdown in most incubators today.

In addition, leaders of female-focused incubators stressed that their networks are not exclusively female; in some cases, the incubators welcome companies with at least one woman in a top leadership role, and other company leaders may be male. In other cases, incubator managers maintain large networks of mentors, investors, and other entrepreneurs of both genders, so that their incubatees build connections with a diverse group of people. Finally, several incubator leaders emphasized that

throughout their programs, they emphasize integrating into the larger entrepreneurial community beyond the incubator's walls. Lada Rasochova, Director of mystartupXX (San Diego, CA) explains:

> *Our point is that we encourage integration. We encourage our teams to apply for all of the other accelerators [at UCSD]. We prepare them on how to submit a better application, how to pitch better. We don't want to create a separate network. We just want to create an additional support for female founders.*

VI. RECOMMENDATIONS

Given the lack of female-focused programming and low participation of women in Triangle-area incubators and accelerators, I recommend that the Women's Business Center of North Carolina move forward on the path to pursuing a female-focused business incubator by conducting a feasibility study. Interviews with leaders in the Triangle entrepreneur community suggest that women entrepreneurs in the Triangle are eager for more female-focused programming, and that networks are in place that would facilitate recruiting and mobilizing women to participate in a new incubator. However, my research is limited in scope, and the lack of interviews and focus groups with large numbers of women entrepreneurs in the Triangle leaves several questions of demand and financial feasibility still on the table.

The National Business Incubation Association recommends that incubator planners hire third-party consultants to conduct a feasibility study before moving forward on any new incubator project. As of 2004, a feasibility study is reported to cost between $20,000 and $40,000. NBIA suggests that a feasibility study consider four main factors (Erlewine & Gerl, 2004):

1. **The Market**
   A feasibility study should address "probable target clients, the potential for deal flow, the services clients will need, and whether an incubator can obtain them" (Erlewine & Gerl, 2004, p. 18). Key here is identifying how the incubator should position itself in the market, and what services and programs women entrepreneurs in the Triangle need and are willing to pay for. My data suggest that women entrepreneurs need more support for non-tech industries and an incubation environment focused on flexibility, mentoring, and confidence-building. However, a feasibility study may reveal that women are more willing to pay for a female-friendly environment focused on technology and science, given the male-dominated culture in these industries.

2. **Buy-in from the community**
   NBIA stresses that a successful incubator has champions within the community, with the "necessary levels of networking skills, political savvy, and passion to make the organizers' idea a reality"(Erlewine & Gerl, 2004, p. 19). Notably, these champions need not be the individuals proposing an incubator or underwriting the feasibility study. Champions should be identified through face-to-face interviews with anyone who may be interested in supporting the project. My interviews suggest that there are existing organizations—such as e51 and HQ Raleigh—that would likely support the concept of a female-focused incubator. It remains to be seen, however,

whether leaders of these organizations would have the time, capacity, or interest to be true champions of a new incubator in the Triangle.

3. **Financial feasibility**
   NBIA stresses that financial planning should include not only the millions of dollars to launch a new incubator, but also a model for the incubator to be self-sustaining in a reasonable amount of time, such as "two to three years" (Erlewine & Gerl, 2004, p. 20). In assessing financial feasibility, third-party consultants should estimate how many rent-paying companies would be needed to create a stable revenue stream for the incubator. A feasibility study may reveal that women entrepreneurs value flexibility over paying to work from a co-working space. If this is the case, a lower-cost "incubator without walls" model may be more appropriate.

4. **Availability of real estate suitable for an incubator**
   A successful incubator needs not only a building to house its clients and programs, but a building of appropriate size, location, configuration, and cost. NBIA reports that locating close to the business district will drive entrepreneurs toward your building, rather than toward other office space. NBIA further emphasizes that incubator planners should balance the need for the perfect size and location with the need for an affordable building, given that "real estate decisions will impact an incubation program's bottom line for many years" (Erlewine & Gerl, 2004, p. 21). Debt-free space, donated by the city or a university, can provide greater financial flexibility down the line. My research does not address available real estate in Durham, creating the need for a feasibility study to further investigate this question.

If a feasibility study reveals that the Triangle market will support a female-focused incubator, the WBC of NC should employ the best practices exposed in this report to maximize its success among women entrepreneurs. The incubator should:

- **Provide a strong mentoring network**, with a high concentration of experienced women entrepreneurs who can mentor new entrepreneurs not only on business basics, but also on navigating the challenges of being female in a primarily male-dominated entrepreneurial and investment community. The WBC of NC should approach the Council for Entrepreneurial Development (CED) about partnership opportunities, through which CED's network of female mentors looking for female mentees could be paired with incubator participants.

- **Provide programming to help women increase their confidence.** Some of the incubator's programming should be focused on human capital development, not only on developing a strong business idea. This may be done in the form of direct programming or, as in the case of Upstart (Memphis, TN), adapting traditional incubation programs to allow women to independently explore the assumptions and weaknesses of their own business concepts. The incubator manager should be cognizant of confidence challenges faced by women, and during check-ins with entrepreneurs, facilitate discussions about confidence. This is especially important as entrepreneurs are preparing to meet with clients, investors, and other communities in which female entrepreneurs may be a severe minority.

- **Facilitate flexible participation models**, so that women entrepreneurs are able to both fulfill family responsibilities and invest time in their business. Avoid requiring women to work out of the incubator for a particular number of hours per week. To make it easier for women to work out of the incubator's space, host workshops and networking events at times that accommodate

the needs of participating women entrepreneurs. Interview data suggest that partnerships with childcare facilities or on-site childcare may also increase women's ability to participate in incubation programs.

Similarly, to accommodate women who may not be able to spend much time working out of the shared workspace, the incubator should provide workshops, networking opportunities, or other services online, so that women with family responsibilities may take advantage of the materials on their own time.

- **Build a culture that is welcoming to women.**
  In designing the incubator space, be aware of how aesthetics may influence the clientele you attract. Ensure that the incubator leadership team includes women, and that a high proportion of speakers and mentors brought in are female. When bringing in resources—food and beverages for events, for example—source from women-led companies when possible, and provide resources that reflect the wishes of your female clients.

- **Encourage networking beyond the incubator with both men and women**
  While building a strong female community, ensure that your female clients' networks include individuals of both genders. Given the heavy male presence in investment circles, it is important that women entrepreneurs exit the incubator with as many supportive connections as possible. Encourage incubatees to attend events hosted by other entrepreneur hubs, such as American Underground and HQ Raleigh, or co-host events or workshops with these organizations to facilitate networking.

VII. RISKS TO STARTING A FEMALE-FOCUSED INCUBATOR

Starting a female-focused incubator in the Triangle is a risky venture, as it remains to be seen whether there is sufficient willingness to pay for space and services among the women entrepreneur community. Starting an incubator involves extensive work, including building a plan for financial sustainability, securing funding, procuring space, building a board of advisors, hiring staff, recruiting entrepreneurs, and providing trainings and mentorship that add value to young, growing companies. The WBC of NC should not undertake this work unless a feasibility study provides clear evidence that the venture will pay off.

Importantly, this report does not address potential funding sources for a female-focused incubator. My research suggests that funding will likely present a challenge, given that other female-focused groups in the Triangle, including Soar and e51, are operating partially or entirely based on the volunteer support of their entrepreneur founders.

The large majority (93 percent) of business incubators in North America are non-profit organizations, with missions focused on economic development. Importantly, most incubators rely on external sponsorship or a host organization for much of their funding. The National Business Incubation Association reports that only 15 percent of North American incubators have no sponsor or host organization (National Business Incubation Association, 2014), signaling that financial self-sufficiency is extremely difficult to achieve.

Among the remaining 85 percent of incubators that rely on sponsors or hosts, 32 percent are sponsored by academic institutions, 25 percent by economic development organizations, and 16 percent by government entities (National Business Incubation Association, 2014).[6] The WBC of NC will therefore be most likely to find funding partners in local universities—Duke University, University of North Carolina at Chapel Hill, or North Carolina State University, among others—or through partnerships with economic development bodies or city agencies. Notably, the City of Atlanta is in the process of launching a female-focused incubator (City of Atlanta, 2015), providing a potential model for a city-sponsored women's initiative, should Atlanta's program prove successful. Numerous attempts to speak with leaders of Atlanta's Women's Entrepreneurship Initiative were unsuccessful, and thus their perspective is not included in this report.

Finally, a women-only environment may solicit criticism from the entrepreneur or funding communities. As discussed earlier, leaders of female-focused incubators and accelerators around the country expressed that they have often been questioned about the benefits of a single-gender incubation environment. It will be essential that the WBC of NC builds a community of supporters of both genders for a new incubator, and consistently provides opportunities for its incubatees to build connections with clients, investors, and other stakeholders of both genders.

VIII. CONCLUSION

Data suggest that the Raleigh-Durham-Chapel Hill area of North Carolina is primed and ready for a new organization aimed at supporting women entrepreneurs. Interviews show that traditional incubators are male-dominated, have residency requirements that likely make it difficult for some women to participate, and display cultures that may be unwelcoming to some women. Unique challenges faced by women entrepreneurs create an opportunity to modify the traditional incubation model, fostering a collaborative community of enterprising women. The Women's Business Center of North Carolina should continue forward on its planning process for a female-focused incubator, conducting a third-party feasibility study that identifies women entrepreneurs' willingness to pay, the appropriate industry niche, and available funding. Should a feasibility study indicate market support, the WBC of NC should employ best practices gathered from female-focused incubators and accelerators nationwide in designing a new incubator to grow women-owned companies in the Triangle.

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[6] For a more detailed breakdown of funding sources for North American incubators, see **Appendix E**.

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IX. APPENDICES

Appendix A: Comparing Incubators and Accelerators

The following chart highlighting typical differences between incubators and accelerators is provided by the National Business Incubation Association (Dinah Adkins, 2011). It is important to note, as discussed earlier, that no consistent definition exists for accelerators, and that the terms "incubator" and "accelerator" are often used interchangeably.

Table 4: Traits of Incubators and Accelerators

	Business Incubators	Seed Accelerators
Clients	All kinds including science-based businesses (biotech, medical devices, nano, clean energy, etc.) and nontechnology; all ages and genders; includes those who have previous experience in an industry or sector	Web-based, mobile apps, social networking, gaming, cloud-based, software, etc.; firms that do not require significant immediate investment or proof of concept; primarily youthful, often male geeks, gamers and hackers
Business Model	Primarily (90 percent) nonprofit business model; for-profits created by corporations and investors	Primarily for-profit business model
Sponsor	Universities, economic development organizations and other community-based groups, sometimes with help from government	Serial, cashed-out entrepreneurs and investors
Selection Process	Competitive selection, mostly from the community	Competitive selection of firms from wide regions or even nationally
Term of Assistance	1-5+ years (33 months on average)	Generally 1-3 month boot camps
Services	Access to management and other consulting, specialized IP, and networks of experienced entrepreneurs; assists businesses mature to self-sustaining or high-growth stage; helps entrepreneurs round out skills, develop a management team and often, obtain external financing	"Fast test" validation of ideas; opportunities to create a functioning beta and find initial customers; links entrepreneurs to business consulting and experienced entrepreneurs in the Web/mobile apps space; assists in preparing pitches to seek follow on investment
Investment	Usually does not have funds to invest directly in the company; more frequently than not, does not take equity	Invests up to $18,000 to $25,000 in teams of co-founders; takes equity in every investee, usually 4-8 percent
Facilities	Provides flexible space at reasonable rates throughout incubation period; many incubators also work with nonresident affiliates	Provides meeting space during boot camps; some are beginning to provide longer-term space

Metrics	Initial: revenue growth, payroll, capital acquisition, number of patents commercialized or filed, new products introduced, number of companies started, percentage of business survival and retention; long-term: ROI to community/university in the form of jobs, technology commercialization, industry sector/cluster expansion, wealth creation and economic diversification, among others	Initial: sales, margins and third-party investments; long-term: ROI on investors' cash via liquidity events – sales, acquisition, larger investment rounds, etc.

Source: Atkins, D. 2011. "What are the new seed or venture accelerators?"

Appendix B: Female-focused Incubators and Accelerators in the United States

The following list, developed in March 2015, is an attempt to document all currently operating female-focused incubators and accelerators in the United States. I include entrepreneurial support programs that self-identify as incubators or accelerators, target startup companies with female founders or women in top-level leadership, offer management guidance and technical assistance, involve a selection and graduation process for participating companies, and, in most cases, provide shared office space.

I identified the following organizations through online searches, conversations with the U.S. Small Business Administration, and referrals from the National Business Incubation Association and Springboard Enterprises. Organizations are listed alphabetically.

Table 5: Female-focused Incubators and Accelerators in the United States

Incubator/Accelerator (Host Organization)	Program Type*	Headquarters Location
Astia	Accelerator	San Francisco, CA
AVINDE Startup Accelerator Program	Accelerator	Austin, TX
Women's Entrepreneurship Initiative Incubator (City of Atlanta)	Incubator	Atlanta, GA
DreamIt Athena (DreamIt Ventures)	Accelerator	Philadelphia, PA
Equita Accelerator	Accelerator	San Francisco, CA
La Cocina Incubator	Incubator	San Francisco, CA
Leadership & Entrepreneurial Accelerator Program (WomenLaunch)	Accelerator	Entirely virtual
MergeLane	Accelerator	Boulder, CO
mystartupXX	Accelerator	San Diego, CA
Prosper Women Entrepreneurs Startup Accelerator	Accelerator	St. Louis, MO
Springboard Enterprises	Accelerator	Washington, DC
SUSLA Small, Women and Minority-Owned Business Incubator	Incubator	Bossier City, LA
The Refinery	Accelerator	Westport, CT
Upstart (Start Co.)	Accelerator	Memphis, TN
WESST Enterprise Center	Incubator	Albuquerque, NM
Women's Startup Lab Accelerator	Accelerator	Menlo Park, CA
YWCA Wausau Business Incubator Program	Incubator	Wausau, WI

* Program type determined through wording on the organization's website, conversations with the organization, or news articles, where necessary.

Appendix C: Incubators and Accelerators in the Triangle

The following organizations are found within Raleigh, Durham, or Chapel Hill, self-identify as incubators or accelerators, target startup companies, offer management guidance and technical assistance, involve a selection and graduation process for participating companies, and, in most cases, provide shared office or laboratory space. Only organizations whose incubators or accelerators are currently in operation are included; those who have suspended their incubation programs are omitted from this list. Organizations are listed alphabetically.

1. THE COOKERY
1101 West Chapel Hill Street, Durham, NC 27701
Respondent: Rochelle Johnson, Owner
http://durhamcookery.com/kitchen-incubator
- **Type of program:** Incubator
- **Industry:** Food/Kitchen
- **Description of services:** commercial kitchen facility; opportunities to participate in Cookery-sponsored events; invitations to Cookery member events (socials, roundtables, etc.); networking with other members and local businesses; business planning services
- **Length of program:** Varies. Length of participation depends on client's needs.
- **Business residency:** Yes. Commercial kitchen space.
- **Cost of program for participants:** Varies. Clients pay for kitchen space, with a rate of $22.50 to $30/hour for the main kitchen, and $20 to $27.50/hour for the bakery (as of April 2015). Cost is dependent on the number of hours purchased, time of day, and location (main kitchen versus bakery).
- **Investment in companies:** No investment.
- **Equity taken:** No equity taken.
- **Services for Women:**
  - **% of participating companies with female founders/co-founders to date:** [Data unavailable]
  - **Women in organization's leadership:** Yes – Co-owner.
  - **Female-focused programming?** None.

2. FIRST FLIGHT VENTURE CENTER*
2 Davis Drive, Research Triangle Park, NC 27709
http://ffvcnc.org/
NOTE: Multiple attempts to contact leaders of FFVC were unsuccessful. The following information is pulled from the FFVC website, and fields are left blank where information was unavailable.
- **Type of program:** Incubator
- **Industry:** Technology/Life science
- **Description of services:** Affordable office and laboratory space with flexible leases, shared business services, technology support, management guidance, counseling, on-site mentors,
- **Length of program:** 2 years
- **Business residency:** Yes.
- **Cost of program for participants:** [Data unknown]
- **Investment in companies:** [Data unknown]
- **Equity taken:** [Data unknown]

- **Services for Women:**
  - **% of participating companies with female founders/co-founders to date:** [Data unknown]
  - **Women in organization's leadership:** [Data unknown]
  - **Female-focused programming:** None.

3. GROUNDWORK LABS
334 Blackwell Street, Suite B006, Durham, NC 27701
Respondent: John Austin, Director
http://groundworklabs.com/

- **Type of program:** Accelerator
- **Industry:** Technology
- **Description of services:** Mentorship; connections to mentors, advisors, investors, and local entrepreneurial community; customer development assistance; Guru Desk (subject matter experts offering office hours); leadership, management, and communications training; intern support; pitch party; perks (free Google cloud, Amazon Activate, & Microsoft Azure cloud credits; outings; etc.); office space; housing stipend for relocating companies
- **Length of program:** 3 months
- **Business residency:** Yes.
- **Cost of program for participants:** Zero cost. Cost of program covered by NC IDEA.
- **Investment in companies?** No investment.
- **Equity taken:** No equity taken.
- **Services for Women:**
  - **% of participating companies with female founders/co-founders to date:** 27%
  - **Women in organization's leadership team:** No.
  - **Female-focused programming?** No specific program, but Groundwork Labs is closely aligned with the Soar program.

4. HAMNER INSTITUTES FOR HEALTH SCIENCES – BIOSCIENCES ACCELERATOR
6 Davis Drive, Research Triangle Park, NC 27709
Respondent: Bud Nelson, General Counsel and Executive Director, Technology Development
http://www.thehamner.org/

- **Type of program:** Accelerator
- **Industry:** Biosciences
- **Description of services:** state-of-the-art equipment; scientific and business development support; networking among participating companies
- **Length of program:** Varies by company.
- **Business residency:** Yes.
- **Cost of program for participants:** Rates vary by company.
- **Investment in companies:** No investment.
- **Equity taken:** Equity taken on a few occasions depending on the company. For the most part, no equity taken.
- **Services for Women:**
  - **% of participating companies with female founders/co-founders to date:** [Estimated] 25-33%

- o **Women in organization's leadership:** Not currently. Management team currently being defined.
- o **Female-focused programming:** None.

5. LAUNCH CHAPEL HILL

321 Rosemary Street, Chapel Hill, NC 27516

http://www.launchchapelhill.com/

NOTE: Multiple attempts to contact leaders of Launch Chapel Hill were unsuccessful. The following information is pulled from the Launch Chapel Hill website, and fields are left blank where information was unavailable.

- **Type of program:** Accelerator
- **Industry:** Industry-neutral
- **Description of services:** Office space; entrepreneurs-in-residence; access to experts in marketing, accounting, legal resources, various industries, UNC; access to potential customers; access to suppliers and partners; lunch-n-learns; speaker series
- **Length of program:** 22 weeks
- **Business residency:** Yes.
- **Cost of program for participants:** $1495 per company (about $270/month). Limited scholarships available based on ability to pay or social mission of business.
- **Investment in companies:** No investment.
- **Equity taken:** No equity taken.
- **Services for Women:**
    - o **% of participating companies with female founders/co-founders to date:** [Data unknown]
    - o **Women in organization's leadership:** Yes – Program Manager.
    - o **Female-focused programming:** No.

6. NC STATE UNIVERSITY TECHNOLOGY INCUBATOR

Centennial Campus, Partners I Building, Suite 2300, Raleigh, NC 27606

Respondent: Ashley Hudson, Incubator Manager

http://techincubator.ncsu.edu/

- **Type of program:** Incubator
- **Industry:** Technology
- **Description of services:** Office and laboratory space; mentoring from business and technical mentors; university partnerships; networking with other entrepreneurs and surrounding community; professional development support; assistance in locating funding; support in marketing, PR, branding, exporting prototyping, supply chain needs; IT support; basic administrative assistance
- **Length of program:** Varies based in individual company's needs. Average time spent in incubator is 2.5 years.
- **Business residency:** Yes.
- **Cost of program for participants:** Varies. $250/month for virtual incubator membership. $450-600/month for office rent. $1580-2300/month for lab rent.
- **Investment in companies:** No investment.
- **Equity taken:** No equity taken.

- **Services for Women:**
  - **% of participating companies with female founders/co-founders to date:** 8%
  - **Women in organization's leadership:** Yes – incubator manager.
  - **Female-focused programming:** None.

7. THINKHOUSE

410 Cutler St., Raleigh, NC 27603
Respondent: Liz Tracy, HQ Raleigh
http://thinkhouse.us/

- **Type of program:** Accelerator
- **Industry:** Industry-neutral
- **Description of services:** Co-living and co-working space; mentoring from seasoned entrepreneurs; 12 week accelerator with coaching and training to develop business model and product-market fit; retreat and personal development; networking opportunities through HQ Raleigh and Bull City Forward
- **Length of program:** 9 months
- **Business residency:** Yes. Residential co-living space for entrepreneurs, with co-working facilities and access to space at HQ Raleigh.
- **Cost of program for participants:** Cost of rent is between $500-600/month
- **Investment in companies:** No investment.
- **Equity taken:** No equity taken.
- **Services for Women:**
  - **% of participating companies with female founders/co-founders to date:** 12% to date (25% in current cohort)
  - **Women in organization's leadership:** Yes – Co-founder, Director of Community Engagement, Coach of the Accelerator
  - **Female-focused programming:** None.

8. THE STARTUP FACTORY

334 Blackwell Street #005, Durham, NC 27701
Respondent: Lizzy Hazeltine, Venture Associate
http://thestartupfactory.co/

- **Type of program:** Accelerator
- **Industry:** Software
- **Description of services:** Local and national mentoring; assistance in validating market fit, gathering customer feedback, testing assumptions; access to network of active angels and institutional venture capitalists, veteran startup founders, and technology experts; a strong alumni community; office space
- **Length of program:** 12 weeks
- **Business residency:** Yes.
- **Cost of program for participants:** $2,500 flat fee
- **Investment in companies:** Yes. $50,000 per company. Possibility of $20,000 - $150,000 convertible note upon completion.
- **Equity taken:** 7.5% of common stock for $50,000 investment. Convertible note also has equity implications.

- **Services for Women:**
  - **% of participating companies with female founders/co-founders to date:** 32%
  - **Women in organization's leadership:** Yes – Venture Associate.
  - **Female-focused programming:** None.

Appendix D: Best Practices for Gender-neutral Business Incubation

The following list of best practices (in bold text below) was compiled by the U.S. Economic Development Administration (EDA), based on its 2011 literature review of business incubation literature (Lewis, Harper-Anderson, and Molnar, 2011, p. 27). This is the most up-to-date best practice compilation for business incubators, and pulls from other well cited peer-reviewed articles. I added a brief description below each best practice, drawn from the 2011 EDA report, as well as from publications by the National Business Incubation Association.

Importantly, the EDA notes that "no one incubator practice, policy, or service is guaranteed to produce incubation program success. Instead, it's the synergy across multiple practices, policies, and services that produce optimal outcomes" (Lewis, Harper-Anderson, and Molnar, 2011, p. 7) There is no silver bullet, therefore, that incubator managers can rely on to guarantee success.

Business Incubation Best Practices

1. **Conduct a feasibility study before starting a program**
   NBIA recommends that incubator planners hire third-party consultants to conduct a feasibility study before moving forward on any new incubator project. As of 2004, a feasibility study is reported to cost between $20,000 and $40,000. NBIA suggests that a feasibility study consider four main factors: (1) the market, (2) buy-in from the community, (3) financial feasibility, (4) and availability of real estate for the physical location of the incubator (Erlewine & Gerl, 2004).

2. **Develop a consensus-driven mission statement**
   Incubation programs should operate similar to a business, with their own mission statement clearly defined. The EDA reports that "overwhelmingly, incubation programs define their primary mission as developing an entrepreneurial culture in their region and creating jobs." Other important missions include 'building or accelerating the growth of new businesses, attracting or retaining businesses in the community, diversifying the local economy, and commercializing technologies" (Lewis, Harper-Anderson, and Molnar, 2011, p. 44). An incubator's mission statement should be developed through a consensus process, involving a diverse range of stakeholders in the entrepreneurial, economic development, and other communities.

3. **Establish client entry & exit criteria**
   An incubator should have an application and screening process through which it selects companies that will help the incubator achieve its stated mission. Entrepreneurs admitted into the program should "be willing to take advice and share information," and should have needs that can be met by the incubator's services (National Business Incubation Association, 2008b).

   An incubator should also have established graduation criteria that determine when a company should exit the program. NBIA suggests that time limits alone are "generally not good graduation criteria. Instead, effective exit criteria should reflect the incubator's mission, and may include whether a company has outgrown the incubator's facilities, the hiring of a certain number of employees, having positive cash flow, or obtaining outside funding, among other criteria (National Business Incubation Association, 2008a).

4. **Collect outcome data**
   The EDA reports that the most successful incubators collect outcome data on their incubated companies for two or more years. These outcome data include "client and graduate firm revenues and employment, firm graduation and survival rates, and information on the success of specific program activities and services" (Lewis, Harper-Anderson, and Molnar, 2011, p. 8). Outcome data may be used to prove positive return on investment, leading to long-term funding for the incubator.

5. **Provide networking opportunities between client firms**
   Incubators should facilitate opportunities for networking among participating companies. The EDA reports that "having strong networks provides an environment that facilitates peer-to-peer learning, mutual support, and potential collaboration, as well as camaraderie" Lewis, Harper-Anderson, and Molnar, 2011, p. 16). This may prove particularly challenging in virtual incubators, where clients are not operating out of a co-working space.

6. **Establish effective tools to deliver support services**
   The EDA reports that incubators that invest more in staffing and program delivery, rather than "building maintenance or debt servicing," have a higher probability of producing successful clients (Lewis, Harper-Anderson, and Molnar, 2011, p. 8). To reduce costs of program delivery, incubators can leverage existing resources and institutions, such as universities or government-backed Small Business Development Centers.

7. **Build networks with area business service providers**
   Incubators should develop a network of business service providers through careful screening, regular evaluation, and use of a trial period to ensure fit with the incubator's mission. The NBIA suggests that service providers should be "talented people who understand the dynamics of early-stage companies" and that incubator managers should "understand the capabilities, core competencies, and time availability of [their] service providers" (National Business Incubation Association, 2008c). Incubators should consider using consultants on a trial project or during a trial period, in order to ensure that they are a good fit for the program.

8. **Market incubators beyond the entrepreneurial community**
   The EDA reports that incubator managers should strive to "embed the [incubation] program in the fabric of the host community" (Lewis, Harper-Anderson, and Molnar, 2011, p. 27). To secure community buy-in, incubators should implement a range of activities to raise awareness about the incubator's mission and work, recruit potential clients, and generate support. The NBIA suggests that marketing efforts should distinguish an incubator from other incubators, economic development programs, or commercial workspaces. This marketing does not necessarily require many financial resources; networking, building relationships, and communicating through online tools can provide low-cost avenues to build community support for an incubator.

The EDA also recommends that incubators provide a menu of key entrepreneurial support services. The following list is drawn directly from the 2011 EDA report. See *Lewis, Harper-Anderson, and Molnar, 2011* for additional information.

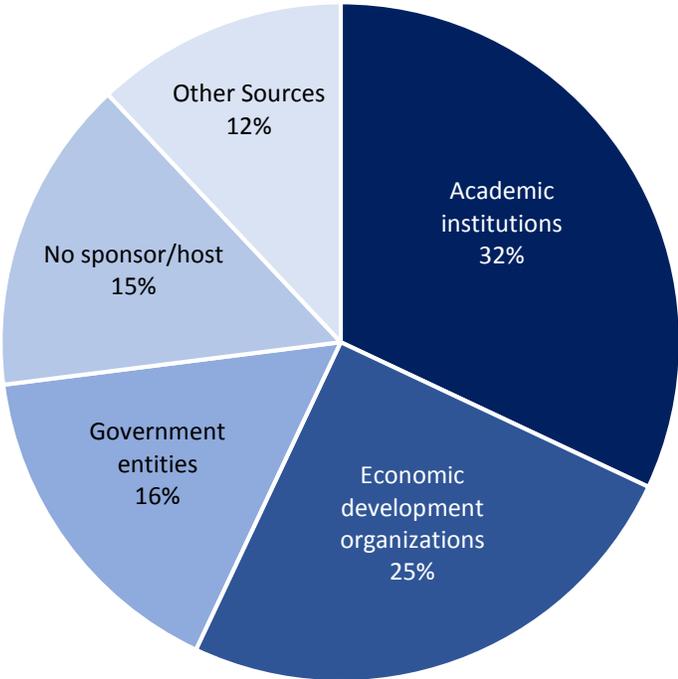Key Entrepreneurial Support Services Provided by Incubators

- Business plan writing and business basics
- Legal assistance
- Access to capital
- Marketing assistance
- Access to broadband high-speed internet
- Mentoring boards for clients with area business service providers
- Close ties with higher education institutions (where possible)
- Accounting and financial management services
- Networking with other entrepreneurs, particularly other clients
- Networking with area business community
- Assistance in developing presentation skills
- Assistance in developing business etiquette

Appendix E: Who Sponsors Incubators?

The National Business Incubation Association provides the following breakdown of funding sources for North American business incubators. NBIA reports that incubator sponsors "may serve as an incubator's parent or host organization or may simply make financial contributions to the incubator" (National Business Incubation Association, 2014).

The greatest number of incubators receive funding from academic institutions, economic development organizations, and government entities.

Figure 1. Percentage of North American Incubators Receiving Funding from Sponsor Category

Source: National Business Incubation Association, 2014