Entrepreneurship at FIU: A Data-Driven Approach for Accessing Entrepreneurial Resources and an Integration-Based Approach for Fostering Entrepreneurial Culture

This concept paper is offered in response to the request for submissions to the FIU – integrating Research, Education, Assessment and Learning (FIU-iREAL) Commission. Specifically, this concept paper addresses question number 9, which asks, how can we best harness the innate entrepreneurial spirit of our students, staff, faculty, and alumni?

1. Introduction

Harnessing the spirit of FIU's entrepreneurial community will require increasing opportunities for entrepreneurship as well as fostering a culture that encourages entrepreneurial solutions. Accordingly, this paper addresses each of these components. First, it discusses the importance of a data-driven approach to facilitating opportunities for entrepreneurship. Second, it discusses an integration-based approach for fostering the culture and infrastructure that encourage and facilitate entrepreneurship.

2. Using data to increase access to entrepreneurial resources

Universities represent one of the most effective launch pads for new businesses. This is largely because of the high concentration of resources that universities make available to entrepreneurs. For example, many eventual businesses begin as academic research. In addition, universities increasingly establish accelerators to provide funding, mentoring, and office space to entrepreneurial students. Finally, university-sponsored entrepreneurship fairs and challenges attract the interest of venture capitalists. FIU's efforts to assist students and others in the university community in launching new businesses must focus on increasing access to resources. A data-driven approach to targeting and obtaining resources will be a critical piece to FIU's efforts.

The resources required in this regard come, to a large degree, from public and philanthropic sources. Federal grants from the National Institutes of Health and the National Science Foundation, for example, fund the research that frequently spawns business ideas. Private foundations provide much of the funding for accelerators: the Jim Moran Foundation made the gift that launched Florida State University's Institute for Global Entrepreneurship and the Strome Family Foundation did the same for Old Dominion University's entrepreneurship efforts.

The trend among public grant-making entities and private philanthropic organizations is towards data-driven funding decisions. This is largely motivated by the Obama Administration's push toward an open government data policy and by software advancements that make data collection and analysis more practical. The result is that public and private funding is and will increasingly become available to applicants who can demonstrate through data a proven track record and who set specific performance indicators that can be measured through data.

Accordingly, an important piece of the capacity for FIU, its students, and its faculty to remain competitive for funding will be the university's efforts to collect and manage data related to its entrepreneurial activities.[1] At a minimum, this will include a few key features:

- Establishing a framework for defining entrepreneur, entrepreneurship, and entrepreneurial activity in a manner than enables valid indicators to be collected and compared across institutions and disciplines;
- Collecting data on the rates and types of entrepreneurial activity;
- Collecting data on the outcomes and impacts of entrepreneurship, particularly with respect to its contribution to productivity, wealth and employment creation; and
- Establishing measurable performance objectives in furtherance of FIU's respective entrepreneurship

[1] A 2008 Organisation for Economic Co-operaton and Development Working Paper entitled *Defining Entrepreneurial Activity* provides one possible starting point for this effort.

goals.

The more data on entrepreneurial activity that FIU collects and makes accessible to students, faculty, and funding institutions, the more competitive FIU's entrepreneurial community will become for available public and private resources that contribute to entrepreneurship.

2. Creating a integration-based entrepreneurial culture

Part and parcel with increasing access to resources is growing a culture where entrepreneurship thrives. An entrepreneurial culture has several key components, including: attitudes that value entrepreneurial solutions to problems; a collective mindset that pursues innovative thinking to solve new and old challenges; a social infrastructure that encourages and facilitates cross-discipline networking.

A common thread among these components is a tendency toward integration: integration of ideas to produce novel solutions and integration of social networks to bring those solutions to life. In short, integration of ideas, people, and organizations can provide the foundation for a robust entrepreneurial culture. Accordingly, as FIU continues to grow and evolve, it should view itself through a lens focused on streamlining connections between its various disciplines, departments, and communities. A few examples that are demonstrative include:

- Foster collaboration between the College of Law and the College of Engineering and Computing for law students to provide legal services to CEC students who are establishing start-up companies;
- Build business and legal education components into courses for computer science, engineering, and other disciplines to give students a high-level understanding of the administrative challenges of starting a business. As an example, see collaborations between MIT EECS and Harvard Law/Business;
- Continue to provide all students regardless of major with a comprehensive liberal arts education to foster analytical, cross-discipline problem-solving skills;
- Recognize that projected STEM growth will occur not in STEM fields but as STEM components of traditional jobs (see STEM published by the Georgetown Center on Education and the Workforce). Accordingly, FIU should build STEM education into the social sciences and business programs, particularly courses on data analytics and coding/programming. This combination of disciplines has the potential to spark entrepreneurial activity; one example is how joining finance and programming made Chicago a start-up hub for financial tech services;
- Engage other South Florida colleges and universities. We cannot recognize the value of creating cross-discipline bonds without also recognizing the value of creating cross-institutional bonds. FIU should increase collaboration with Miami-Dade College, the University of Miami, and other colleges and universities in the region. Our competition is not at the institution-level with UM; it is at the metropolitan level with Atlanta, Boston, etc. MIT and Harvard, UCLA and USC, Berkeley and Stanford, Emory and Georgia Tech – are all examples of neighbor institutions that collaborate extensively. FIU, its students, and the greater Miami community likewise would all benefit from increased collaboration.

3. Conclusion

To harness its entrepreneurial spirit, FIU must work to increase access for students and others in the university community to funding and other resources. Recognizing that funding from public and private sources represents a key ingredient of entrepreneurial opportunity, FIU must establish a data-driven framework for targeting and obtaining funding for the entrepreneurial endeavors of its students, faculty, and alumni. Simultaneously, FIU must build a culture where its students, faculty, and alumni possess a natural trajectory towards entrepreneurship. Such a culture is characterized by integration, including cross-discipline problem-solving and robust, diverse social networks that offer the social capital required to launch and sustain start-up companies. These two strategies to fostering entrepreneurial culture and opportunity respectively will be critical to FIU's efforts to promote entrepreneurship on campus and throughout its broader community.