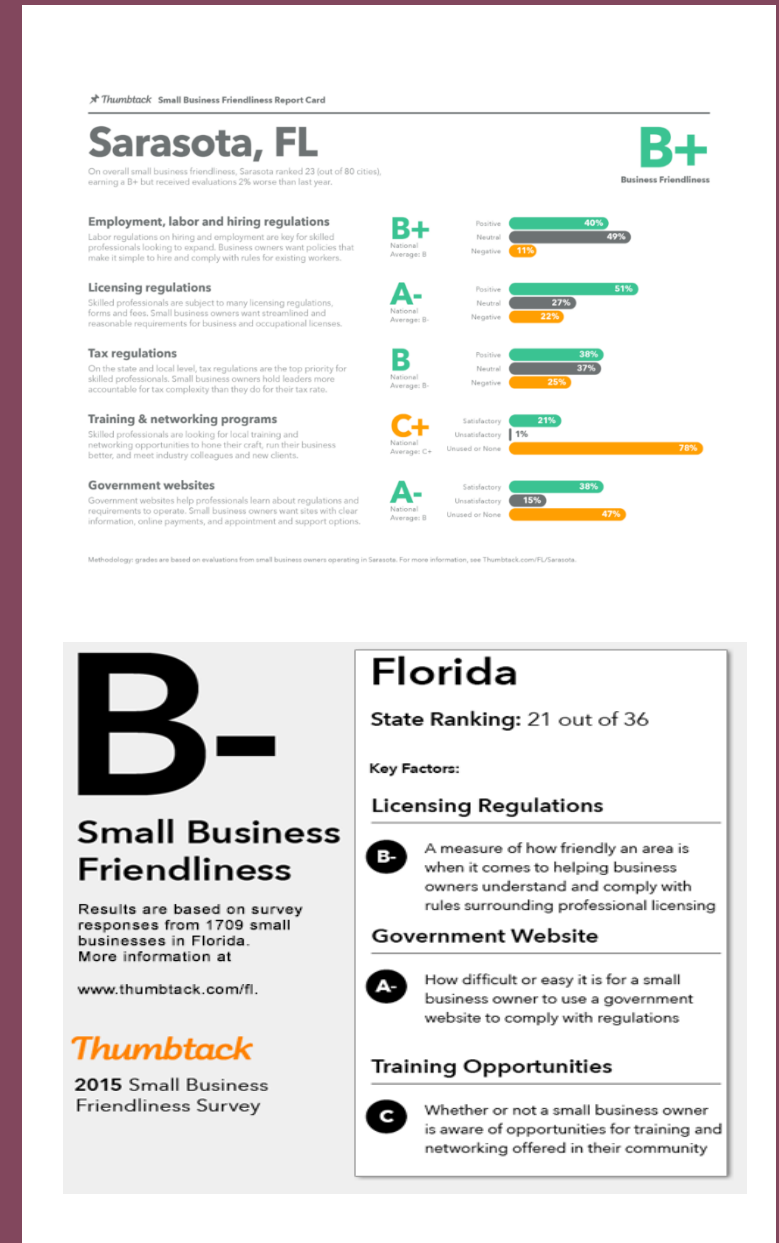
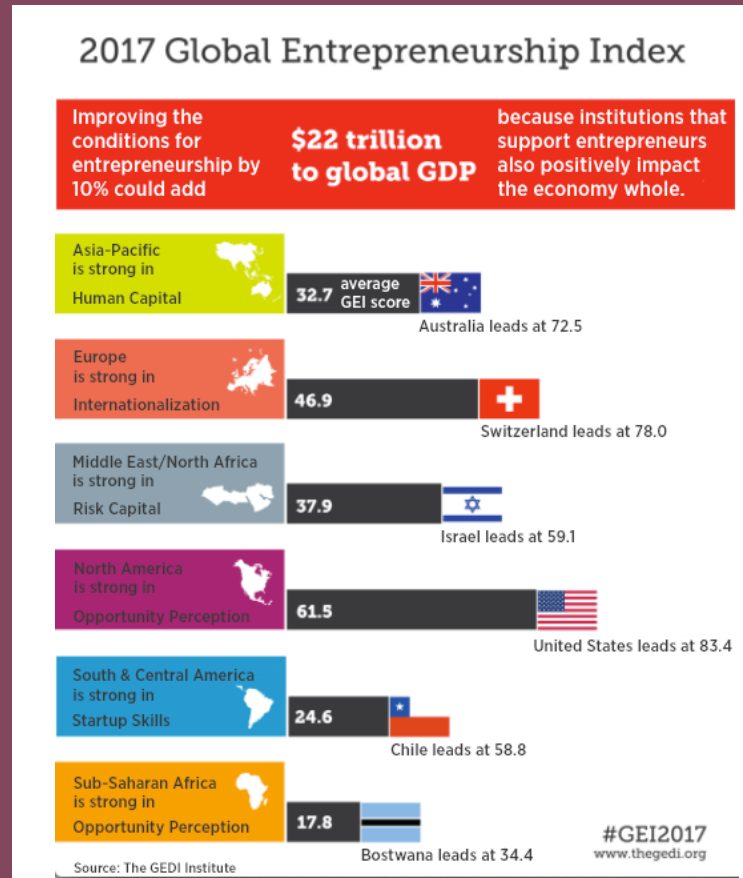
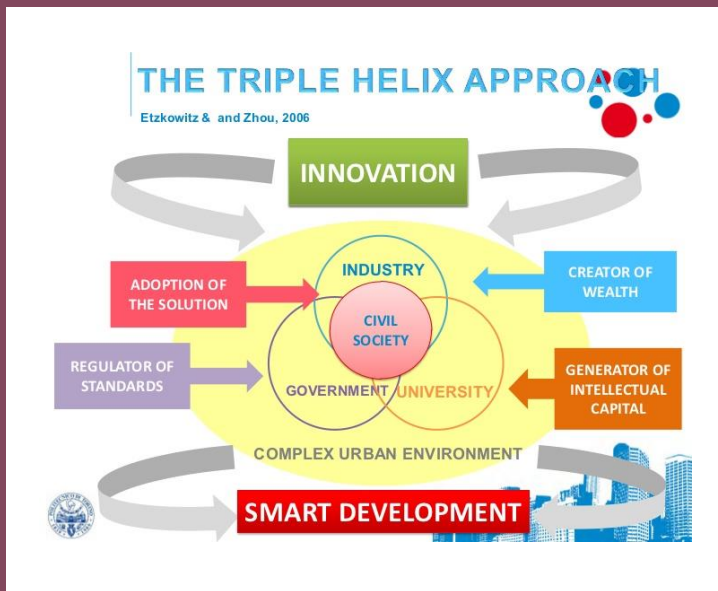
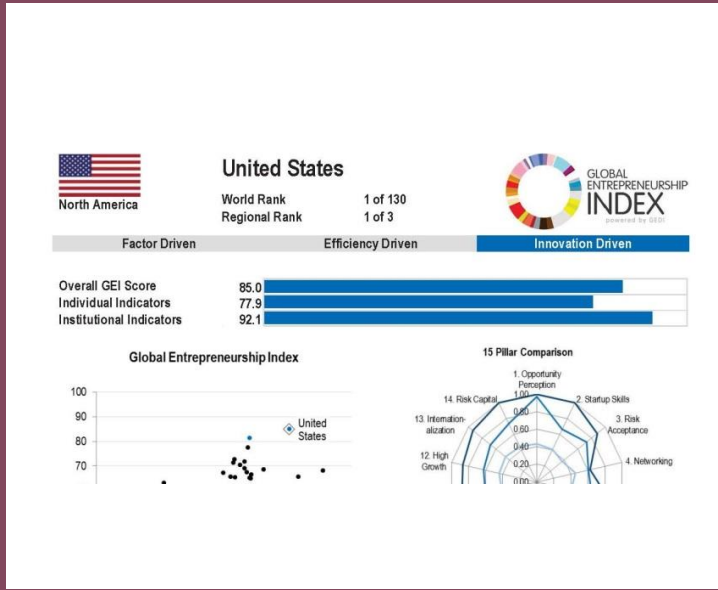


The Triple-Helix Network Approach in the state of Florida: an entrepreneurial ecosystem analysis by Carlton Robinson



Abstract

The Triple-Helix network approach to entrepreneurial ecosystems is an international standard that also serves as an effective service design for supporting entrepreneurial communities. Triple-Helix networks aim to integrate collaboration between academic institutions, government, and industry toward the cultivation of innovative communities. The impact of this approach is less definitive where community leaders seek a systematic way to leverage entrepreneurship and innovation for economic returns. An entrepreneurial ecosystem impact rating, based on dimensions of entrepreneurial breadth and depth, is introduced as a method of entrepreneurial ecosystem analysis. Analyses and characteristics of entrepreneurial communities from 67 Florida counties with at least one Triple-Helix network element are described and used as supporting knowledge. The outcomes are examined to address whether the Triple-Helix network approach yield slow economic returns or a higher gain developmental model in the state of Florida.

Triple-Helix Networks

Interest

- Triple-Helix Networks as effective service design for entrepreneurial activity in the state of Florida.
- Impact of the Triple-Helix approach to entrepreneurial activity in the state of Florida.

Evaluation

- Entrepreneurial Breadth/Depth Indices (Economic Returns)
- Entrepreneurial Ecosystem Impact

Background

- CEDEV 580 discussion around entrepreneurial ecosystems led to the discovery of Entrepreneurial Social Infrastructure article.
 - Entrepreneurial social infrastructure: a necessary ingredient (Flora & Flora, 1993)
- CEDEV 597 exercise regarding breadth and depth of entrepreneurial activity led to explorations of measurement (interaction & purpose).
 - Interaction and purpose in highly entrepreneurial communities (Fortunato & McLaughlin, 2012)
- STAT 800 course focused on exploring ways to measure entrepreneurial ecosystems. Led to the discovery and further interest in Triple-Helix networks.
 - Organizing product innovation: hierarchy, market, or Triple-Helix networks (Fitjar et al, 2014)
 - Triple-Helix systems: an analytical framework for innovation policy and practice in the knowledge society.
- Work experience in economic development dating back to 2006 in with various chambers of commerce in the state of Florida.

CEDEV Relevancy

- Leadership in entrepreneurial ecosystems is relevant to community and economic development (CEDEV 500)
- I found great value in the *Strength of Weak Ties* article. Granovetter (1973) analyzed diffusion studies and networks as a way of understanding ties between people. He posited that more people can be reached through weak ties.
 - What is the relation between strength and degree of specialization of ties, or between strength and hierarchical structure?
 - How can "negative" ties be handled?
 - Should tie strength be developed as a continuous variable?
 - What is the developmental sequence of network structure over time?

CEDEV Activities in Entrepreneurship

- Externalities are unintended consequences of economic activity that may be positive or negative. They emerge when society benefits more than the individual and/or organizational decision-maker.
- Macro- Attributes that give entrepreneurship the propensity to be a form of currency in community and economic development
 - Entrepreneurial breadth
 - Entrepreneurial depth
 - Entrepreneurial Ecosystem
 - Innovation
 - Jobs
 - Knowledge Spillover
 - Sales
- Meso-network and localized production
- Micro- attributes that contribute to regional capital
 - Entrepreneurs
 - Entrepreneurial intentions
 - Industry
 - Institutions

Triple-Helix Networks

Interest

- Triple-Helix Networks as effective service design for entrepreneurial activity in the state of Florida.
- Impact of the Triple-Helix approach to entrepreneurial activity in the state of Florida.

Evaluation

- Entrepreneurial Breadth/Depth Indices (Economic Returns)
- Entrepreneurial Ecosystems
- Does the Triple-Helix network approach yield low economic returns or a higher gain development model in the state of Florida?

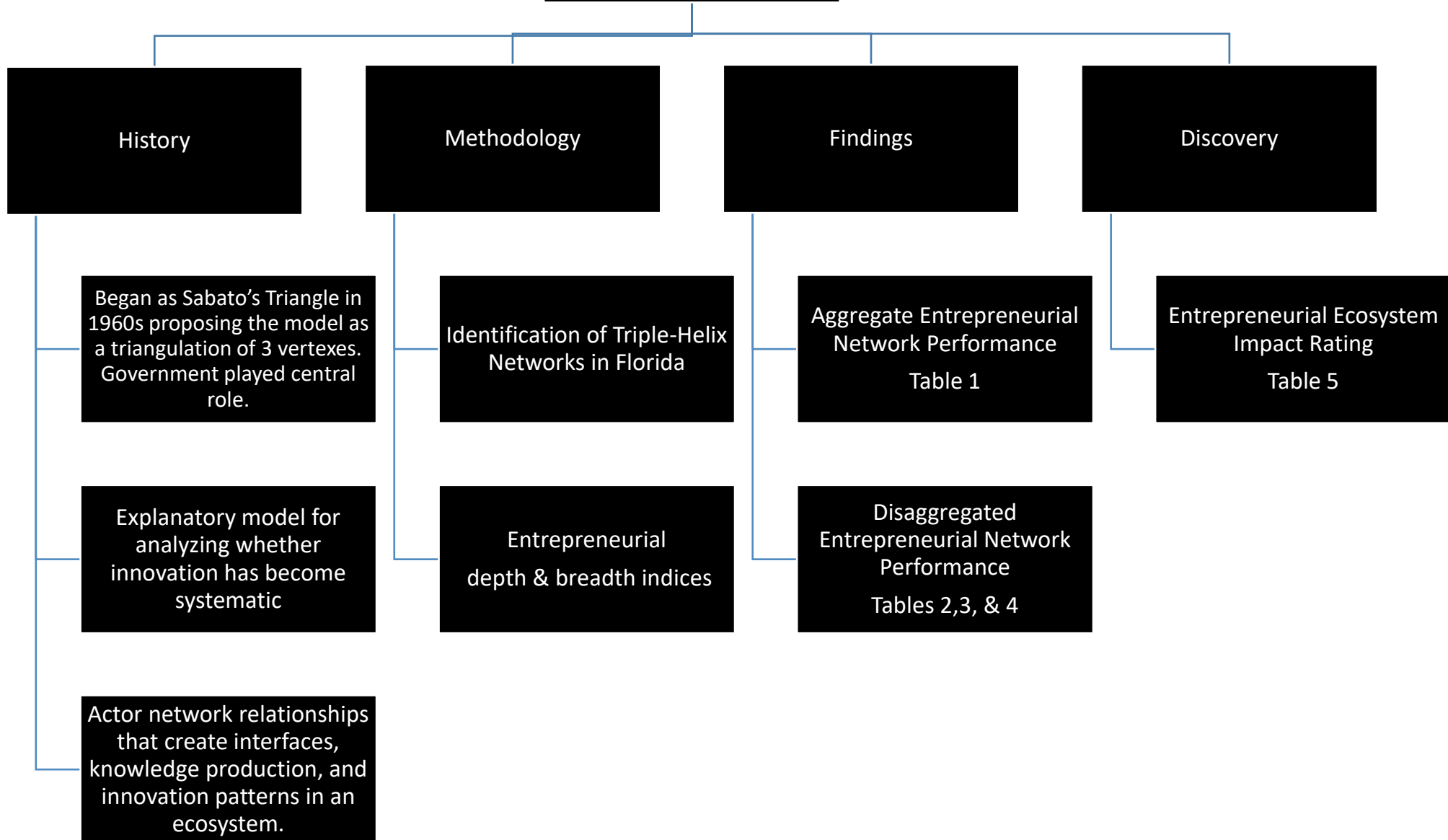
Public dialogue of entrepreneurship as a component of CEDEV

- Institutions within Triple-Helix networks such as academics, government, and industry will positively influence an entrepreneurial ecosystem.
- What relationships, economic frameworks, entrepreneurship capital measures are needed to cultivate entrepreneurship for economic gain?
- What are the cost/benefits of using public investment to develop entrepreneurial communities?
- Best efforts to realize positive externalities?
- Best efforts to measure effectiveness of entrepreneurial ecosystem?
- Best path to cultivate an entrepreneurial community?
- Actor-environment engagement.
- Who are the productive economic agents from industry?
- Explain variability between entrepreneurial communities.

Entrepreneurial Ecosystem Performance in Florida

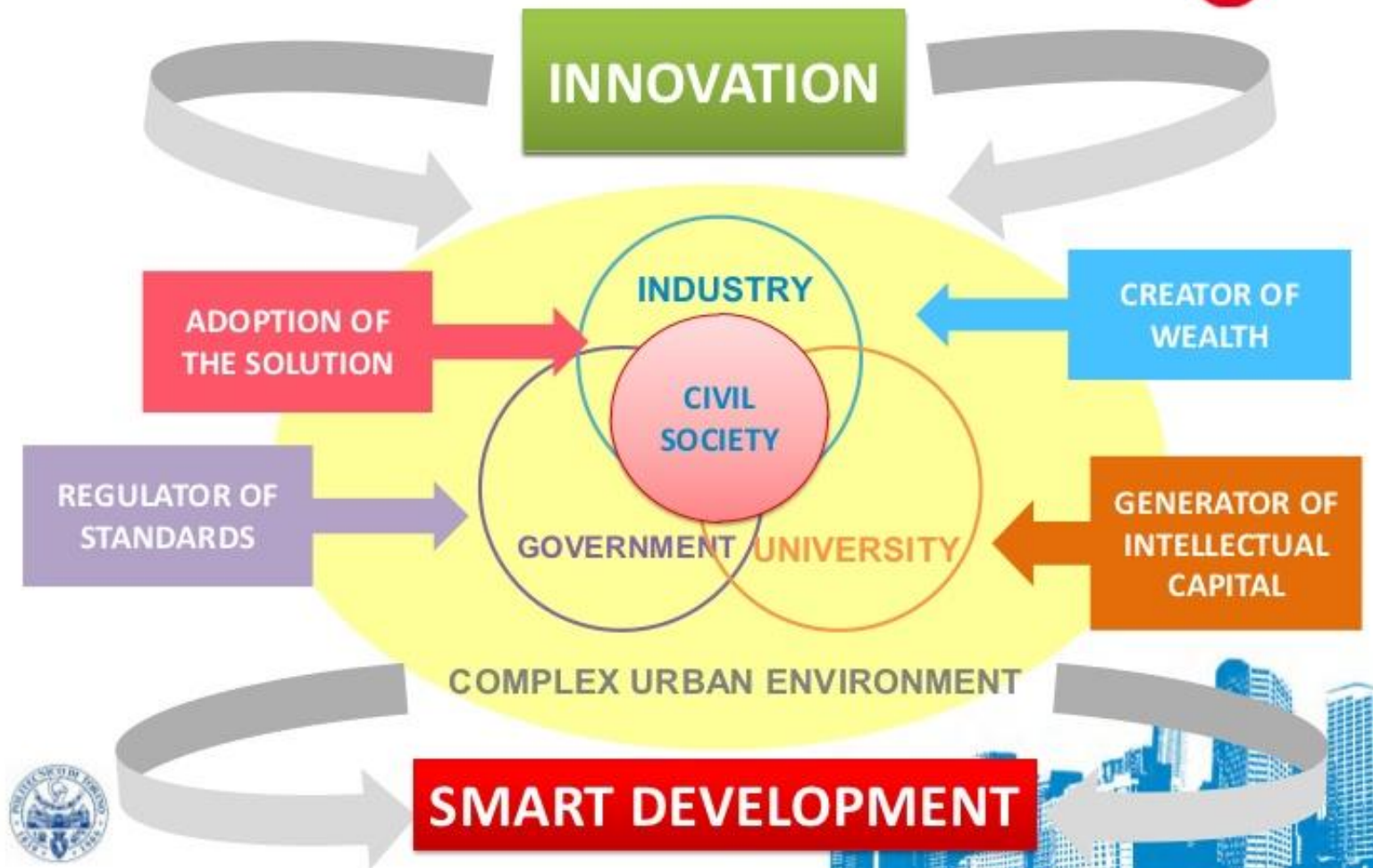
- Interaction (Units of Analysis)
 - Breadth (Self employment density)
 - Depth
 - Sales Per Business
 - Sales Per Employee
- Purpose (Externalities)
 - Attraction
 - Employment growth
 - Higher amenity levels
 - Higher gain development models
 - Industry growth
 - Innovation rates
 - Investment
 - Knowledge Spillover
 - Retainment
 - Value creation

Triple-Helix Network as a higher gain development model?



THE TRIPLE HELIX APPROACH

Etzkowitz & and Zhou, 2006





United States

World Rank 1 of 130
Regional Rank 1 of 3



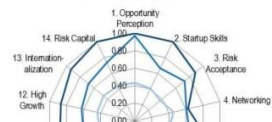
Factor Driven Efficiency Driven Innovation Driven

Overall GEI Score	85.0
Individual Indicators	77.9
Institutional Indicators	92.1

Global Entrepreneurship Index



15 Pillar Comparison



Thumbtack Small Business Friendliness Report Card

Sarasota, FL

On overall small business friendliness, Sarasota ranked 23 (out of 80 cities), earning a B+ but received evaluations 2% worse than last year.

B+

Business Friendliness

Employment, labor and hiring regulations

Labor regulations on hiring and employment are key for skilled professionals looking to expand. Business owners want policies that make it simple to hire and comply with rules for existing workers.



Licensing regulations

Skilled professionals are subject to many licensing regulations, forms and fees. Small business owners want streamlined and reasonable requirements for business and occupational licenses.



Tax regulations

On the state and local level, tax regulations are the top priority for skilled professionals. Small business owners hold leaders more accountable for tax complexity than they do for their tax rate.



Training & networking programs

Skilled professionals are looking for local training and networking opportunities to hone their craft, run their business better, and meet industry colleagues and new clients.



Government websites

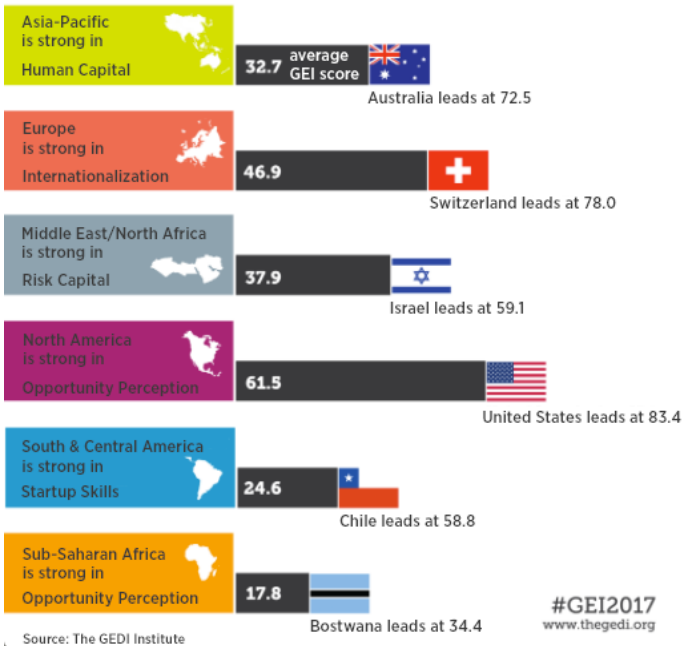
Government websites help professionals learn about regulations and requirements to operate. Small business owners want sites with clear information, online payments, and appointment and support options.



Methodology: grades are based on evaluations from small business owners operating in Sarasota. For more information, see Thumbtack.com/FL/Sarasota.

2017 Global Entrepreneurship Index

Improving the conditions for entrepreneurship by 10% could add **\$22 trillion to global GDP** because institutions that support entrepreneurs also positively impact the economy whole.



Source: The GEDI Institute

#GEI2017
www.thegei.org

B-

Small Business Friendliness

Results are based on survey responses from 1709 small businesses in Florida. More information at www.thumbtack.com/fl.



2015 Small Business Friendliness Survey

Florida

State Ranking: 21 out of 36

Key Factors:

Licensing Regulations

B- A measure of how friendly an area is when it comes to helping business owners understand and comply with rules surrounding professional licensing

Government Website

A- How difficult or easy it is for a small business owner to use a government website to comply with regulations

Training Opportunities

C Whether or not a small business owner is aware of opportunities for training and networking offered in their community

Methodology:

Global challenge to measure entrepreneurial ecosystems

Share 8 Indices.

Table 1. Aggregate Entrepreneurial Network Performance

Disaggregated Depth Table of Community Interactions	LD-SP (47)	HD-SP (20)	LD-SPE (48)	HD-SPE (19)	LD-SPB (43)	HD-SPB (24)
Low Breadth (34)	24	10	21	13	15	19
High Breadth (33)	23	10	27	6	28	5
	Individual		Firm		Firm	

SP= Sole Proprietor
 SPE= Sales Per Employee
 SPB= Sales Per Business

Table 2. Disaggregated Entrepreneurial Network Performance
(Non Triple-Helix)

Disaggregated Depth Table of Community Interactions of 54 Counties	LD-SP (41)	HD-SP (13)	LD-SPE (40)	HD-SPE (14)	LD-SPB (38)	HD-SPB (16)
Low Breadth (26)	21	5	16	10	13	13
High Breadth (28)	20	8	24	4	25	3

SP= Sole Proprietor
SPE= Sales Per Employee
SPB= Sales Per Business

Key finding: fewer high breadth/high depth performances at firm-level; implication is that entrepreneurship may not be a higher gain model.

Table 3. Disaggregated Entrepreneurial Network Performance
(Triple-Helix)

Disaggregated Depth Table of Community Interactions of 13 Counties	LD-SP (6)	HD-SP (7)	LD-SPE (8)	HD-SPE (5)	LD-SPB (5)	HD-SPB (8)
Low Breadth (8)	3	5	5	3	2	6
High Breadth (5)	3	2	3	2	3	2

SP= Sole Proprietor
SPE= Sales Per Employee
SPB= Sales Per Business

Key finding: similar performance across all three measures for Triple-Helix communities. Implication is that there may be facilitating conditions that allow Triple-Helix communities to be associated with high breadth/high depth communities at a higher rate at the firm-level than non Triple-Helix communities.

Table 4. Disaggregated Entrepreneurial Network Performance
(Triple-Helix Research)

Disaggregated Depth Table of Community Interactions of 6 Counties	LD-SP (2)	HD-SP (4)	LD-SPE (3)	HD-SPE (3)	LD-SPB (1)	HD-SPB (5)
Low Breadth (5)	2	2	3	2	1	4
High Breadth (1)	0	2	0	1	0	1

SP= Sole Proprietor (FGCU-Lee County and UM-Miami-Dade County)

SPE= Sales Per Employee (UM-Miami-Dade)

SPB= Sales Per Business (UM=Miami-Dade)

Key finding: majority of research universities located in low breadth communities; implication that quality/size of firms in these areas perform better than sole proprietors

Table 5. Entrepreneurial Ecosystem Impact Rating

Category	County	Rank	SP	SP	SPB	SPB	SPE	SPE
			LB/HD	HB/HD	LB/HD	HB/HD	LB/HD	HB/HD
3	Miami-Dade	1		x		x		x
3	DeSoto	1	x		x		x	
3	Duval	1	x		x		x	
3	Hillsborough	1	x		x		x	
3	Polk	1	x		x		x	
3	Taylor	1	x		x		x	
2	Baker	7			x		x	
2	Broward	7				x		x
2	Collier	7		x		x		
2	Escambia	7	x		x			
2	Hamilton	7			x		x	
2	Hardee	7			x		x	
2	Indian River	7		x				x
2	Liberty	7			x		x	
2	Marion	7			x		x	
2	Pinellas	7			x		x	
2	Seminole	7			x		x	
2	Washington	7			x		x	

Key finding: University of Florida (Alachua), University of Central Florida (Orange) and Florida State University (Leon) are flagship universities that have highest reputational capital in the state of Florida for entrepreneurship.

Conclusions

- This research concluded through indices and a rating system that the mere existence of such networks does not lead to higher gains.
- The agglomeration advantages of Triple-Helix networks in the state of Florida remain inconclusive as they relate to community and economic development.
- The existence of a strong entrepreneurial social infrastructure may not lead to higher gains.
- This work contributes to the Triple-Helix approach in underlining that Triple-Helix networks must be of sufficient scope and have identifiable facilitating conditions in order to deliver expected benefits.
- Not all Triple-Helix networks are entrepreneurial in nature.
- Evaluating the framework conditions of entrepreneurial ecosystems is difficult due to varying degrees of entrepreneurial intensity and quality within a community.
- Economic framework conditions may have a larger role in the performance of an ecosystem than the existence of a Triple-Helix network.