# The Economic Need for Entrepreneurship

# The Role of University Entrepreneurship and Innovation Centers and Programs on Economic Growth

## Prof. Dafna Schwartz

Chairperson, Bengis Center for Entrepreneurship & Innovation

Ben-Gurion university of the Negev, Israel

DafnaSch@som.bgu.ac.il

Conference : Education & Business OBRAD, 2<sup>nd</sup> - 3<sup>rd</sup> June, 2016, Zagreb, Croatia

Pro. Dafna Schwartz, Israel

Entrepreneurship and Innovation: key drivers for economic growth

Are important factors in creating:

- New businesses
- New jobs
- Competitive advantages for existing businesses
- Opportunities for economic and social mobility
- ✓ Reducing economic gaps



More and more universities are incorporating Entrepreneurship & Innovation into their core agenda

- Developing study programs
- Encouraging research
- Developing extracurricular programs
- Initiating outreach programs



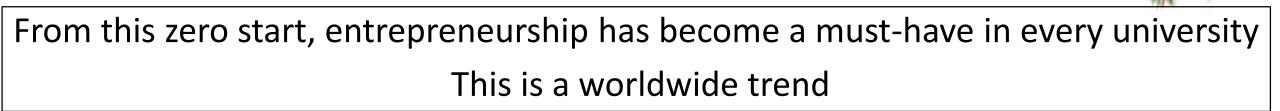
Developing special measures that enable the implementation of these programs

One of the common measures is the establishment of an entrepreneurship center

# Increase in entrepreneurship programs over time in both numbers and diversity

USA

- 1970s entrepreneurship was almost absent from university programs
- 1979 93 colleges and universities started offering courses in entrepreneurship
- In 2004 the courses had grown to over 1,600 (Solomon 1979, 1982, 1986, 1991, 1997, 2000 and 2003)
- In 2016 most colleges and universities offer courses & programs.



# Could Entrepreneurship be taught?



### Yes - Entrepreneurship could and should be taught!

Contrary to the view that entrepreneurs and innovators are born as such

- Essential skills in the labor market
- For students that see the option of setting up and running their own business as a viable career choice
- For employees in their career path by creating value for their companies

# A plurality of curricular offers

The format and content can be distinguished

- But, the objectives of entrepreneurship education are usually a combination of the:
  - Development of theoretical knowledge and
  - practical skills for entrepreneurial thinking and acting.



# Universities are challenged to design special methods for teaching Entrepreneurship

- Experimental teaching
- Hands on experience
- Participating in real-life situations and activities
- Activities outside the classroom
- Collaboration with external partners (private, public)



#### All these force universities to adopt teaching methods outside their traditional frameworks

# Wide range of extra-curricular Entrepreneurship programs

- Programs suitable for <u>all students</u> on campus outside the academic programs
- Programs in collaboration with the private and public sector
- Offer a resource network for students (mentors, alumni, guest speakers etc.)
- Programs in established formats which are conceptualized by third parties
- Outreach activities for the community, region or state.

Lilischkis, S., Volkmann, C., and Halbfas, B. (2015). "Supporting the Entrepreneurial Potential of Higher Education." Report Deliverable 5 related to Service Contract." No. EAC-2013-0567, Version 1.1, European Commission

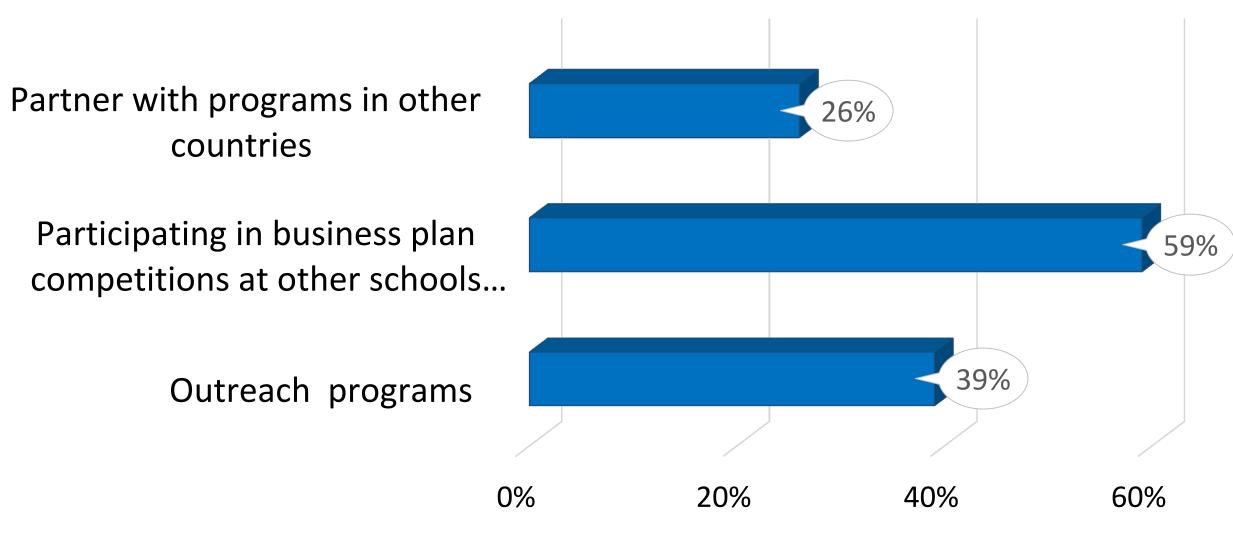


#### Diverse Entrepreneurship Programs at Universities - example from EU(2015), SEPHE study

No.	Case (country)	Theme / category focused	Innovative approach
1	University of Bucharest (Romania)	Developing a strong and distinct position for providing EE / Curricular offers	Master programme for entrepreneurship in energy sector; international team teaching
2	University of Cambridge (United Kingdom)	Persistently innovating EE models / Extra- curricular offers	Extra-curricular activities such as Enterprise Tuesday, Ignite or Enterprisers were first of its kind
3	University of Coimbra (Portugal)	Developing EE in a very traditional university / Curricular offers, mindsets	Building up a regional entrepreneurial ecosystem
4	Dublin City University (Ireland)	DCU Ryan Academy: a public-private partnership in EE / Organisational set-up	Co-operating with a large enterprise for operating an EE academy
5	University of Huddersfield (United Kingdom)	EE across all Schools and how to train the trainers / Curricular offers and their management; organisational set-up	EE as "everybody's responsibility" – teaching "venturing" as well as "realising new ideas"
6	Kaunas University of Technology (Lithuania)	Developing EE with international expert networks / Outreach to external stakeholders	Systematic involvement of experts from abroad for implementing and developing EE
7	Technical University of Kosice (Slovakia)	Extra-curricular EE activities and start-up coaching within the region	Growing entrepreneurship through extra-curricular EE with regional and national partners
8	Kozminski University (Poland)	Developing minds for ambitious entrepreneurship and training educators at other universities / Developing mindsets	Focus on ambitious entrepreneurship
9	University of Liège (Belgium)	ULg VentureLab: establishing an entrepreneurial ecosystem at a university	Building up an entrepreneurial ecosystem at a public university
10	University of Linz (Austria)	Inspiring teaching and a support network for academic entrepreneurs / Curricular offers / outreach to external stakeholders	Patent-based business-planning course combining scientific- technology transfer and curricular EE
11	University of Ljubljana (Slovenia)	Implementing the Design-Thinking approach in EE / Curricular offers	Applying the Design Thinking method to entrepreneurship education
12	University of Lüneburg (Germany)	Developing a comprehensive approach for diverse target groups / Curricular offers, organisational change	Integrative and comprehensive EE approach, targeting all faculties and different student groups
13	University of Lund (Sweden)	Embedding entrepreneurship education in a regional context / Curricular offers, outreach to external stakeholders	Action-reflection approach and intensive interaction with local stakeholders in EE
14	EM Lyon (France)	Educating entrepreneurs as a prime objective of a private business school / Curricular offers	Emphasis on entrepreneurship education in all degree programmes
15	Polytechnic University of Milan (Italy)	Experience-oriented EE / Curricular offers	Implementing an experience-oriented approach to EE
16	University of Osijek (Croatia)	Developing EE from scratch over time / Organisational change, mindsets	Building EE from scratch in an unfavourable post-war and post- socialist environment
17	Erasmus University Rotterdam (Netherlands)	Building the Erasmus Centre for Entrepreneurship and advancing corporate entrepreneurship / Curricular offers, organisational set-up	Sustaining EE through extension towards corporate entrepreneurship and community of entrepreneurs
18	University of Southern Denmark (Denmark)	IDEA centre for promoting EE across the university / Curricular offers, organisational set-up	A central unit outside faculties (IDEA centre) facilitates EE across the whole university
19	Tampere University of Applied Sciences (Finland)	Education in team entrepreneurship / Curricular offers, extra-curricular activities	Education in team entrepreneurship through team learning
20	University of Valencia (Spain)	Developing EE and business culture with regional enterprises / Curricular offers, outreach to external stakeholders	Professors' Summer School in EE as a train-the-trainer approach to spread entrepreneurship to non- business faculties

Lilischkis, S., Volkmann, C., Gruenhagen, M., Bischoff, K., and Halbfas, B. (2015). "Supporting the/Entrepreneurial Potential of Higher Education." Final Report, No. EAC-2013-0567 European Commission, Education and Culture. http://www.sephe.eu/home/

# Collaboration with external partners in the entrepreneurship programs - USA, 2014



The National Survey of Entrepreneurship Education. An Overview of 2012-2014 Survey Data. The George Washington University Center for Entrepreneurial Excellence (12/2014)

### Universities are ranked yearly by their entrepreneurship programs

#### Forbes / Leadership

NOV 10, 2015 @ 12:58 PM 32,388 VIEWS

### The Top 50 Schools For Entrepreneurs, 2016



Susan Adams

l write about entrepreneurs, small business owners & what drives them





A class in entrepreneurship at Babson College. (AP Photo/Chitose Suzuki)

Pro. Dafna Schwartz, Israel www.forbes.com/sites/susanadams/2015/11/10/the-top-50-schools-for-entrepreneurs-2/#160a081654de

# Top 10 graduate schools for entrepreneurship for 2015, USA (FORBES)





Northwestern University





# 3 CHICAGO BOOTH

 $The \, University \, of \, Chicago \, Booth \, School \, of \, Business$ 











www.forbes.com/sites/susanadams/2015/11/10/the-top-50-schools-for-entrepreneurs-2/#160a081654de

5

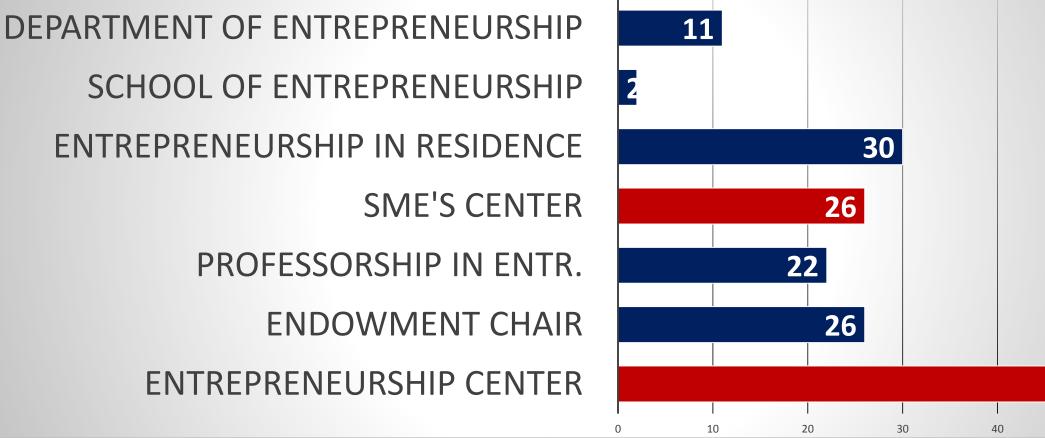
### Measuring the direct contribution over the past 5 years (Forbes, 2015)

	No. of companies that have started by graduates	Raised in funding
Harvard Business School graduates	more than 75	more than \$1.9 billion
Babson College	550 companies	
Babson College, graduate entrepreneurship faculty	All of them have started, bought or run a business	
University of Chicago's Booth School of Business	more than 200	over \$127 million

www.forbes.com/sites/susanadams/2015/11/10/the-top-50-schools-for-entrepreneurs-2/#160a081654de

# Developing special measures that enable the implementation of these programs

### Complimentary Entrepreneurship measures (%) - USA, 2014



Pro. Dafna Schwartz, Israel

57

50

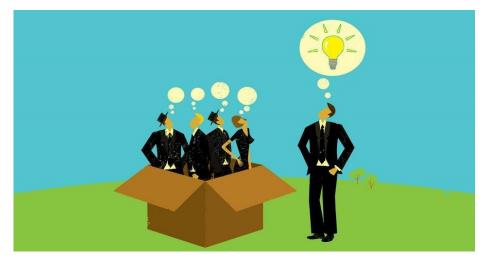
14

Figure 1.7. The National Survey of Entrepreneurship Education. An Overview of 2012-2014 Survey Data, The George Washington University Center for Entrepreneurial Excellence (12/2014)

# Entrepreneurship (or/and SME's/Innovation) Centers

- One of the most common measures
- Enables the universities to offer programs

beyond their traditional boundaries





### Harvard Business School - Rock Center

ENTREPR	ENEURSHIP		ABOUT ROCK	CK FACULTY & COURSES	NEWSLETTER	
SHOWCASE	INSIGHTS	PROGRAMS				
Harvard Business School	→ Entrepreneurship					
ROCK	CENTER					
	enter for Entrepreneurship empowers eate ventures that revolutionize.	student and alumni				

# we launch the people WHO LAUNCH

EXPLORE

Our entrepreneurs start with big dreams and drive. Through the HBS experience, they evolve—becoming skilled entrepreneurial managers. They become the leaders who launch what matters.

"Entrepreneurship is the pursuit of opportunity beyond resources currently controlled." - Professor Howard Stevenson

#### STARTUP STUDIO NYC

workspace and community home in New York City for high potential alumni ventures

#### NEW VENTURE COMPETITION

Student Competition; Alumni Competition

#### ROCK ACCELERATOR PROGRAM

ROCK SUMMER FELLOWS

ROCK 100: THE NETWORK

ENTREPRENEURS-IN-RESIDENCE.

https://entrepreneurship.hbs.edu/Pages/default.aspx

Pro. Dafna Schwartz, Israel

# BABSON Babson College Wellesley, MA-The Arthur M. Blank center for entrepreneurship



The center focuses on expanding the practice of entrepreneurship of all kinds through innovative cocurricular programs and global collaborative research initiatives that inspire and inform entrepreneurial thought and action.

Pro. Dafna Schwartz, Israel babson.edu/Academics/centers/blank-center/Pages/home.aspx



# University of Houston Cyvia and Melvyn Wolff Center for Entrepreneurship



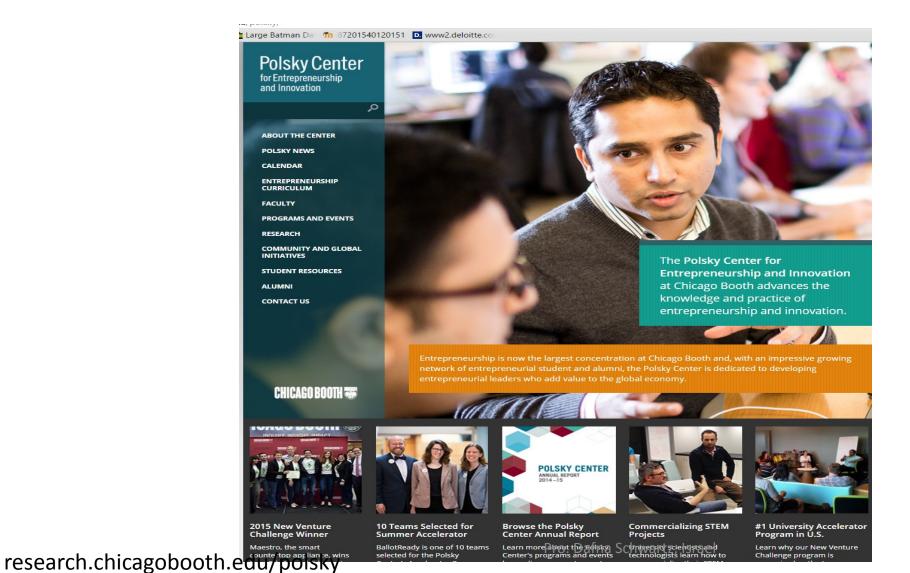
Our mission is to organize, expand and promote the knowledge and practice of entrepreneurship

#### Activities:

- Academicians
- Enrichments
- Competitions
- Outreach

www.bauer.uh.edu/centers/wce/about

## The University of Chicago Polsky Center for Entrepreneurship and Innovation

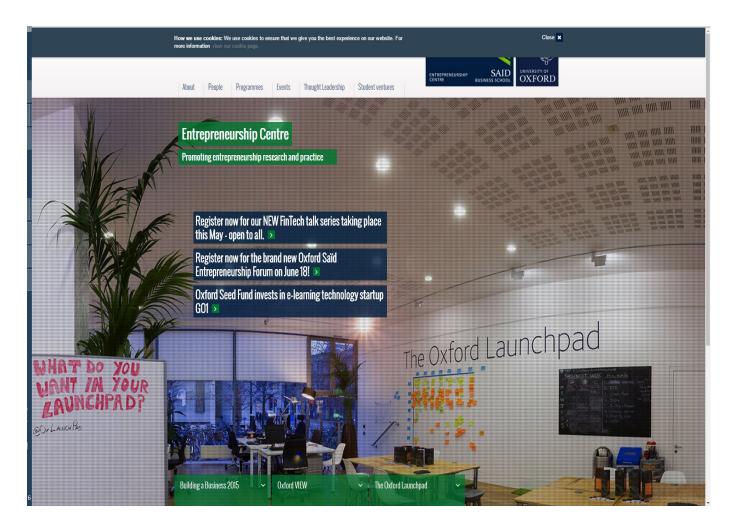


The Center brings together students, alumni, faculty, cross-campus partners, professionals, and others from the business community and beyond to share ideas, foster creativity, and network through a number of industryrelated events.

Programs:

- Experiential learning programs
- Conferences
- Workshops
- Speaker Seriés

# University of Oxford - The Entrepreneurship Center



Its programs and activities combine research on, and practical teaching of, entrepreneurship to support entrepreneurs and high-growth companies.

- Degree programs
- Extracurricular & open programs
- iTunes U & podcast series
- Competitions
- Schools and community outreach

# University of Cambridge – The Entrepreneurship Center



The Entrepreneurship Centre at Cambridge Judge Business School aims to inspire, enable and research entrepreneurship. The Centre encompasses the full entrepreneurial journey - starting with the empowerment of aspiring entrepreneurs through to the creation and development of earlystage ventures, all the way to small and medium size enterprise growth.



# University of Southern Denmark **IDEA Entrepreneurship Center**



including entrepreneurs, business leaders, consultants and investors. Our goals include contributing to the dissemination of knowledge from the university to the surrounding community, provision of knowledge and research to public debate and also the creation of a partnership between the university, the students and the private sector.

Pro. Dafna Schwartz, Israel

S

# INSEAD - Center for Entrepreneurship (ICE)



- Entrepreneurship @ INSEAD
- Entrepreneurship Teaching Innovation (ETI)
- Entrepreneurship Bootcamps
- Entrepreneurs in Residence
- Resources for Entrepreneurs
- INSEAD Venture Competition
- INSEAD Entrepreneurship Forum
- INSEAD Alumni Entrepreneurs

http://centres.insead.edu/entrepreneurship/ice/index.cfm



2016 GCEC CONFERENCE SEPT. 29- OCT. 1, AT THE UNIVERSITY OF ROCHESTER AND ROCHESTER INSTITUTE OF TECHNOLOGY



www.globalentrepreneurshipconsortium.org/home



# Bengis Center for Entrepreneurship & Innovation

Guilford Glazer Faculty of Business and Management Ben-Gurion University of the Negev



# The Bengis Center for Entrepreneurship & Innovation

- Established in the year 2000
- The first university entrepreneurship center in Israel
- Later on other universities joined this trend
- In 2000 the MBA Entrepreneurship & Innovation track was established



# **Highlights of the Latest Activities**

# Academic Programs

Pro. Dafna Schwartz, Israel

# Supporting academic teaching programs

In the framework of the MBA Entrepreneurship & Innovation track

- Assisting in experimental teaching
- Linking courses to external partners from the private and public sector
- Guest speakers, assignments with the private sector, preparing business plans for business etc.
- Supporting international seminars



# Encouraging academic research

- Promoting research collaboration
- Assisting in data collection
- Academic round tables/conferences
- Research position papers



# Extracurricular programs outside the academic program

✓ For all students at Ben Gurion University (BGU)
✓ In many cases open to the community

# Conferences, Workshops and Networking Events

- Fostering the spirit of entrepreneurship and innovation
- Providing knowledge and information needed to transfer an idea into a business
- Creating opportunity for interacting and networking with people from other disciplines, sectors and social circles



# Innovation Un-conference

Conference content is determined by the participants who take an active role in preparing and running the event.

In 2014: Israeli Innovation Meets Global Impact

- Over 3,200 people attended the event
- 80 short lectures
- Technological displays

Presented by companies, entrepreneurs, researchers and students





# Entrepreneurship on the Bar

Series of Lectures at local bars in Beer-Sheva Lecturers: entrepreneurs, investors and global companies





2015 theme - Breaking BarriersSupporting the TEDxWhiteCity Event







# Global Entrepreneurship Week (GEW)

# International initiative that introduces young people to entrepreneurship over the span of one week



Each year the Center holds a wide variety of unique activities to mark Global Entrepreneurship Week

### 12 events

In collaboration with various external partners

Pro. Dafna Schwartz, Israel

# Assisting in the establishment of new businesses



#### Provision of Personal Business Consulting to Students and Faculty

- Consultation and Mentoring services by professional business consultants for developing ideas into business initiatives
- Sharing best practices
- Tailored training according to participant needs



#### **Annual Business Plan Competitions**

2 tracks (2015):

Innovation & Hi-tech Track

Socio-Economic Negev Regional Development Track

More than 300 participating students from all faculties



#### Hackathons

- A gathering of minds over a short period of time (about 24-48 hours) to create usable software for specific target
- Programmers, developers, designers, hi-tech personnel, students and faculty members collaborate intensively
- Mentors representing external partners

# • Markan Barkan Barkan

The Future Cop

#### The Innovate2Educate



Encourage new ventures for the public sectors: *"Innovation in the Public Sector" Project* 

Collaboration: BGU with Google Israel

- Brings together top students from different departments: Business Management, Engineering and Public Policy
- Teams work to create technological platforms that will benefit the public sector





#### Supporting International Seminars: Brazil, Australia, Poland

"Innovation and Entrepreneurship in an Emerging Economy: Brazil" seminar University of Fortaleza (UNIFOR) and the Ceara's Industrialists Association, Ceara, Brazil (FIEC)





"Technological Entrepreneurship" Seminar: Australia Collaboration with Monash University, Australia



45



#### Establishment of a Joint Center for Entrepreneurship & Innovation with Jilin University, China

- The joint center will promote academic cooperation in research and teaching.
- Serve as a platform for encouraging connections between Chinese and Israeli businesspeople.
- The Center will be operated by the Bengis Center and the China-Israel Center for Entrepreneurship and Innovation at Jilin University.





### **Community Outreach Activities**



#### Direct activities to encourage economic growth for the Negev Region

- Initiate projects with entities from the Negev region to foster entrepreneurship and innovation
- Encourage assignments and projects by students for assisting businesses and organizations in the Negev
- Business plan competition focusing on the economic and social development of the Negev

ISRAEL

#### Direct activities to encourage economic growth -National level

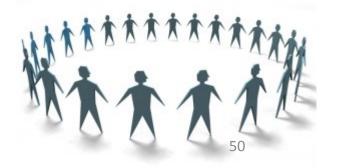


- Initiate projects with national entities from the public and private sector: high tech companies, VC funds, NGO, government (innovation unit of the police etc.)
- Encourage assignment by students for assisting start-ups and small businesses: preparing business plan, strategic plan etc.
- Business plan competition focusing on Innovation and high tech
- Assisting in global collaboration Jilin University Joint Center

#### Other Activities in collaboration with various entities

Including:

- Model UN Supporting the National Model UN Competition
- "Young Entrepreneurs Do Business"
- Innovation Afternoon- In collaboration with "Starter"
- Magshimim Program







#### Bengis Center for Entrepreneurship & Innovation

Guilford Glazer Faculty of Business and Management Ben-Gurion University of the Negev

## Accelerator Establishment



#### The Inno-Negev Accelerator

A joint venture of the Bengis Center and BGN Technologies (BGU's TTO)

- Helps cohorts of hi-tech ventures
- Short-term 4 month cycles
- Including 10-15 ventures
- Provides
  - ✓ Working space
  - ✓ Mentorship



**Deloitte** 

#### **Produced 11 New Start-ups in its First Cycle**







#### Results

- Fostering the spirit of entrepreneurship & innovation
- Thousands of participants (around 2,000-3,500) every year
- Dozen of new businesses created: new jobs: self employment, small businesses or start ups
- Students acquire the skills and tools to create their own jobs in the future
- Contributes and broadens the career path of the students in companies
- Contribution to the economic growth of the Negev region and the state

#### Summary

All these activities demonstrate the important role university' Entrepreneurship Centers and programs could play in fostering entrepreneurship and contributing to economic growth

The Bengis Center serves as a catalyst and facilitator, creating and channeling innovation and entrepreneurial activity

- for BGU students and faculty
- for the Negev community
- for Israel as a whole



Thank You!