



# University Entrepreneurship and Innovation Ecosystem

27 January 2022

Presentation by Dr Nur-Ezan Mohamed

**CHITOSE GROUP**

- What is university entrepreneurship and innovation ecosystem and why is it important?
- Case study of successful university entrepreneurship and innovation ecosystems
- Comparison of different university entrepreneurship and innovation ecosystems



# Successful Businesses that Started Out from Universities



CULTIVATE  
THE EARTH!

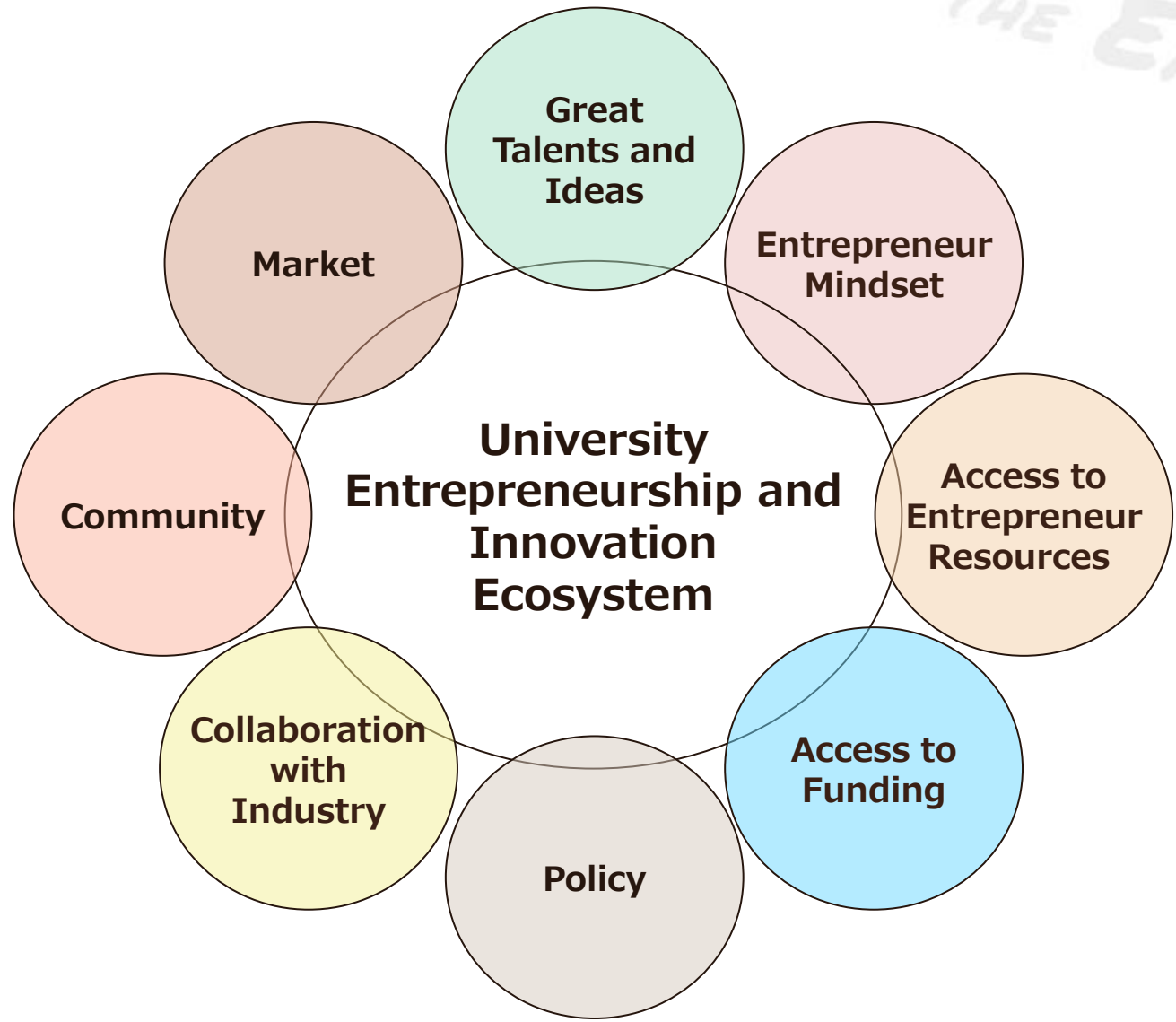


# Importance of Entrepreneurship and Innovation Ecosystem in University

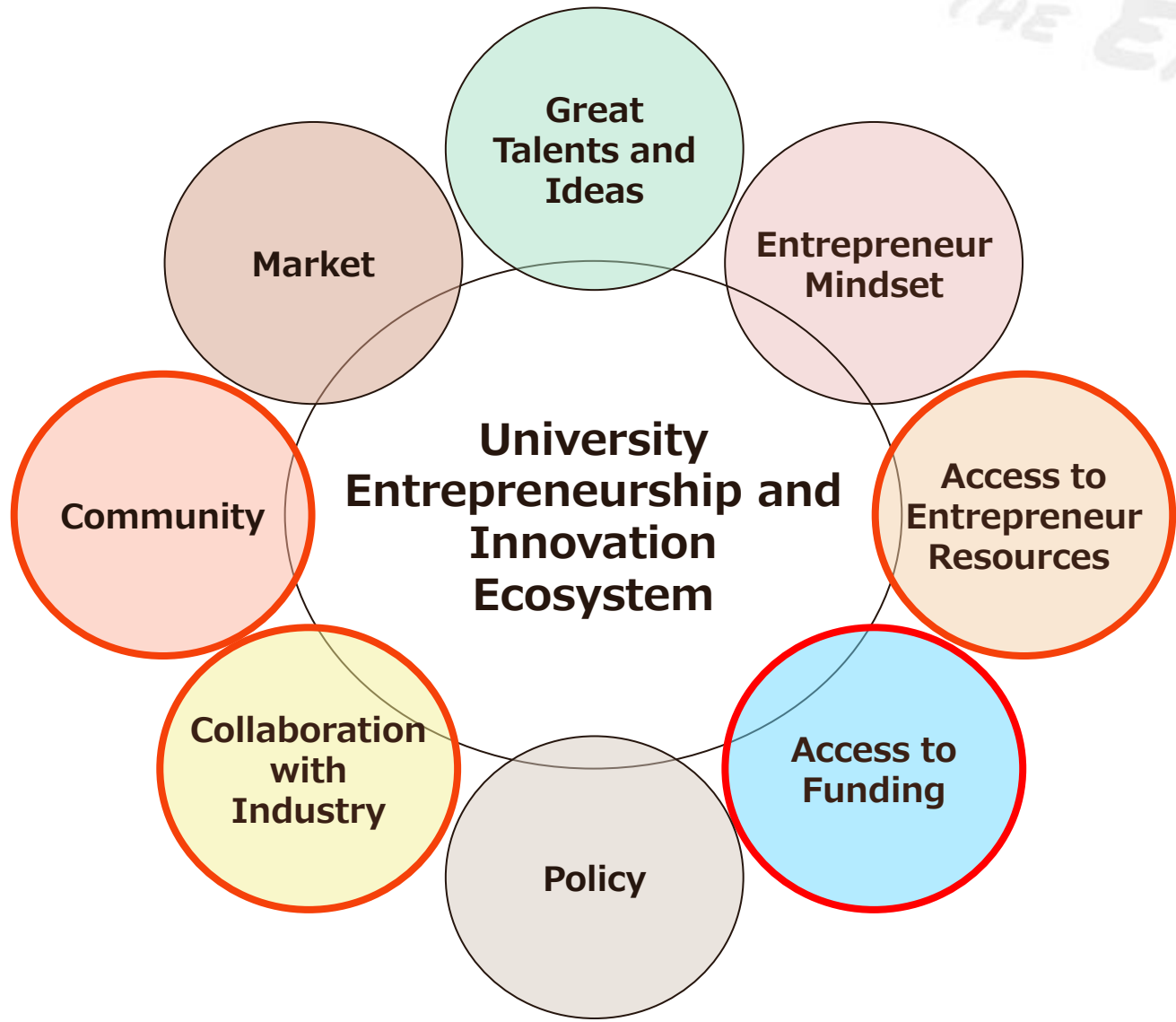


- Commercialization by supplying knowledge and talent to meet business needs
- Generation of additional funding
- Ideas/Inventions/Findings of scientific research are put into use outside of academia and making real world impact
- Researchers to feel a sense of personal fulfillment which leads to deeper meaning in their work
- Attract sponsors and investors
- Provide network of future employment opportunities for students including job creation

# What It Takes for University to Build Ideal Ecosystem



# What It Takes for University to Build Ideal Ecosystem



# Successful University Entrepreneurship and Innovation Ecosystems



STANFORD  
UNIVERSITY

#1 World's Most Innovative  
University Ranking

Source: Reuters



UNIVERSITY OF CAPE TOWN  
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

#1 University in Africa

Source: Times Higher Education's World University  
Ranking



東京大学  
THE UNIVERSITY OF TOKYO

#5 Asia World's Most Innovative  
University Ranking

Source: Reuters

# Entrepreneurship and Innovation Ecosystem 1 : Stanford University



Founded in 1885



3801 Staff



28,253 students



- 4210 companies
- 102 unicorns founded by alumni of Stanford University
- Raised over \$150.70 billion USD in funding from 6999 investors
- Revenues of \$2.7 trillion USD annually
- Created 5.4 million jobs since the 1930s



**STANFORD**  
UNIVERSITY





## Access to Funding

- Stanford Seed Funding
- Alumni funding

## Access to Entrepreneur Resources

- Hackathons and competitions
- Office of Technology Licensing
- Launchpad Accelerator programme
- “Entrepreneurial Thought Leaders” seminars

## Collaboration with Industry

- Industrial Affiliate Programme
- Stanford-Silicon Valley

## Community

- Stanford Alumni Association
- Accessible university resources to promote collaboration
- StartX

# Entrepreneurship and Innovation Ecosystem 2: University of Cape Town



Founded in 1829



1208 Staff



28,703 Students

- More than 20 spin-offs in 10 years
- Licensing and intellectual property revenue of \$1.96 million USD in 10 years
- Value of equity held in 9 spin-off companies: more than \$7.03 million USD
- Btw 2012-2019, 5 founders of start up which managed to raise \$1 million USD in funding received post graduate education at UCT



**UNIVERSITY OF CAPE TOWN**  
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD



## Access to Funding

- University funding for different stages of start up development
- Equity in spin off companies

## Access to Entrepreneur Resources

- Department of Science and Innovation's (DSI), National Intellectual Property Management Office (NIPMO)
- Incubator/accelerator UCT GBS Solution Space
- E-track cohort and Demo day

## Collaboration with Industry

- Industry sponsored bursary programs
- Larger collaborative multi-year research programs
- Mentorship programme with industry

## Community

- UCT surrounded by incubators and accelerators which promote collaboration
- UCT entrepreneur Society

# Entrepreneurship and Innovation Ecosystem 3 : The University of Tokyo (UTokyo)



Founded in 1877



3801 Staff



28,253 Students

- 323 companies
- Annually 500 inventions and conducts 1600 collaborative research projects
- Total market capitalization is around \$132 million USD
- First university in Japan to have a technology licensing office in 2018





## Access to Funding

- Own investments into start ups

## Access to Entrepreneur Resources

- Entrepreneur program including business plan contest
- Division of University Corporate Relations
- Todai Technology Licensing Office (Todai TLO)
- 4 Incubation facilities e.g., University of Tokyo Entrepreneur Plaza

## Collaboration with Industry

- Provides network opportunities and introduction to investors various companies
- Promotion of start ups to companies through close collaboration with support companies that provide fundings

## Community

- 234 start ups clustering around Utokyo Hongo Campus



CULTIVATING  
THE FUTURE

# Key Points

## ■ Access to Funding

- Availability of funding during different stages of start up especially during the early stages
- Have means to sustain fundings for future start ups e.g alumni funding or equity in university spin off companies

## ■ Access to entrepreneur resources


- Integrate entrepreneurship education into university curriculum
- Presence of incubators and accelerators to allow access of network, mentorship, funding, physical workspace
- Legal, financial and administration support for commercialization of research or start up creations through a centralized office such as Technology Licensing Office
- Demo day and competitions which allow early start ups to gain exposure and polish their business pitch
- Seminars by industry experts allow them to impart their entrepreneurship experience and network connections

## ■ Collaboration with industry

- Give students the opportunity to experience and solve real world industry problems present in the local ecosystem
- Offer students more hands-on learning experiences to work directly with industry partners

## ■ Community

- Support university-wide activities to encourage the entrepreneurial spirit
- Online presence to facilitate collaboration



**Thank you for your attention.**