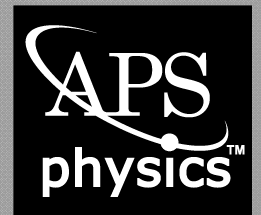
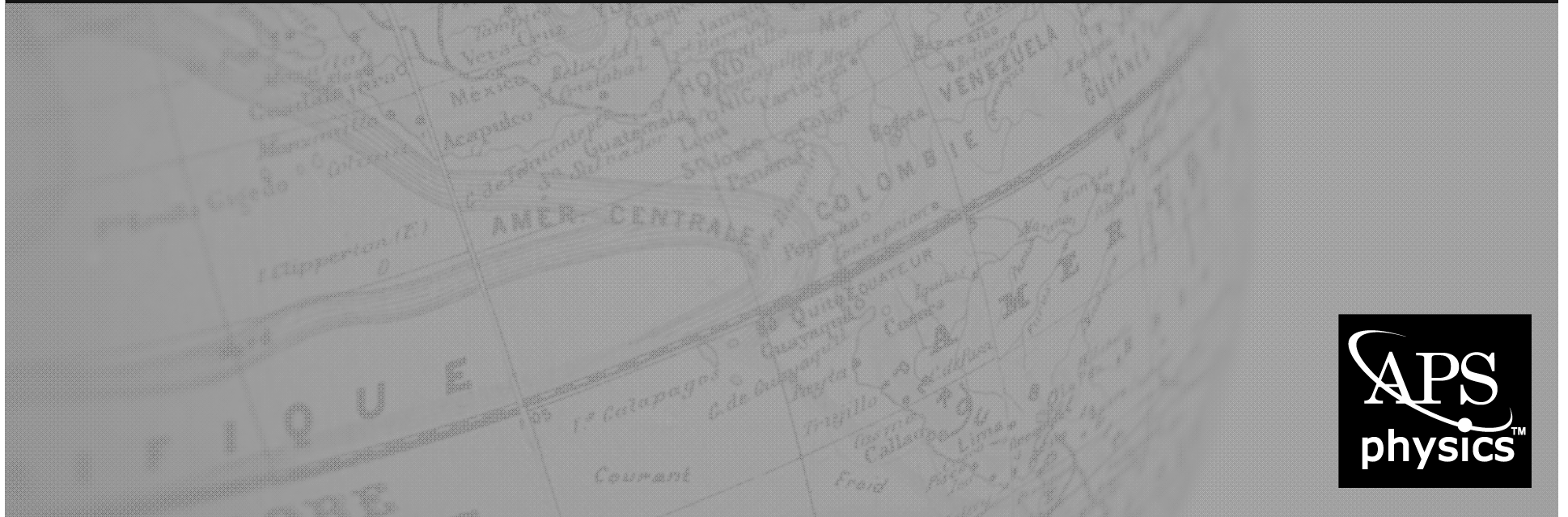


THE ROAD TO COMMERCIALIZATION



Dr. Siva Sivananthan

December 3, 2013



DISCLAIMER

The views expressed by the speaker are his own and may not necessarily reflect those of his University.

OVERVIEW

- Background
 - Family in Sri Lanka & U.S.
 - Research –From Beginnings to Next Generations
- The Road to Commercialization
 - Bridging the Gap
 - Early Stages
 - Creating a Foundation
 - Importance of the Team
 - Equip yourself with...
 - Small Business Economics
 - Challenges: Be Ready to Embrace Them
 - IP/Licensing and Managing Conflicts
 - What are Your Options?
- Wrap-Up
 - Insights
 - Q & A

FAMILY-SRI LANKA HERITAGE



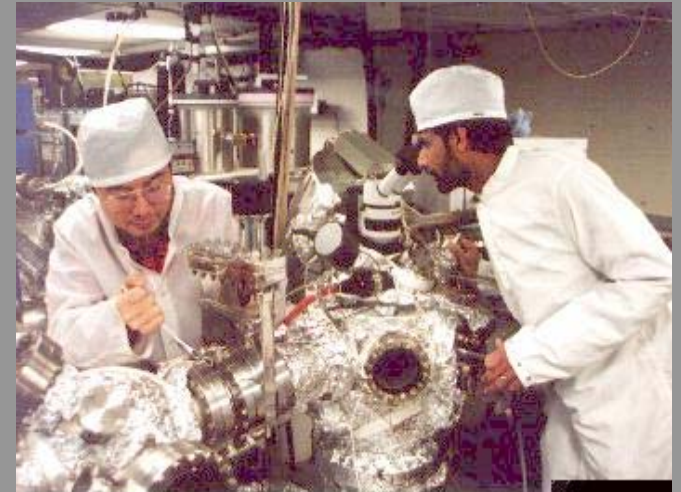
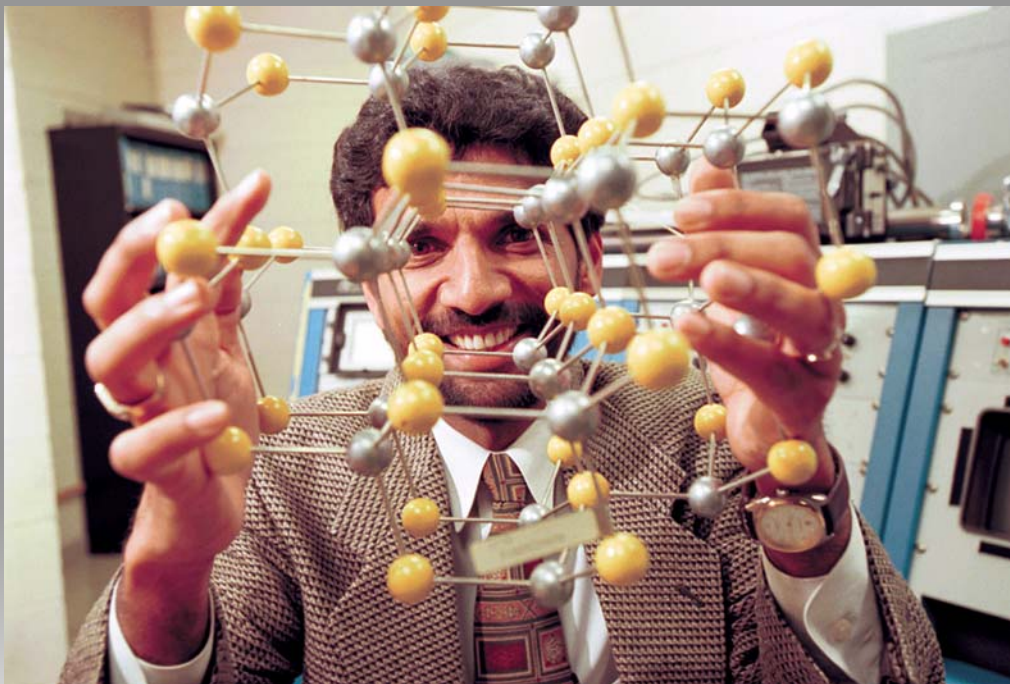
Background



FAMILY-U.S.



RESEARCH-BEGINNINGS



Background



RESEARCH-NEXT GENERATIONS



BRIDGING THE GAP



BRIDGING THE GAP



EARLY STAGES

- Resources
 - What do you need?
 - What do you have?
 - How much risk are you willing to take?
- Priorities
 - Technology, creating a concept
 - Capital
 - Location
 - Formulate a team

Be vigilant and make common sense decisions

CREATING A FOUNDATION

- The Four Keys

Mission

Vision

Strategy

Values

- Business plan

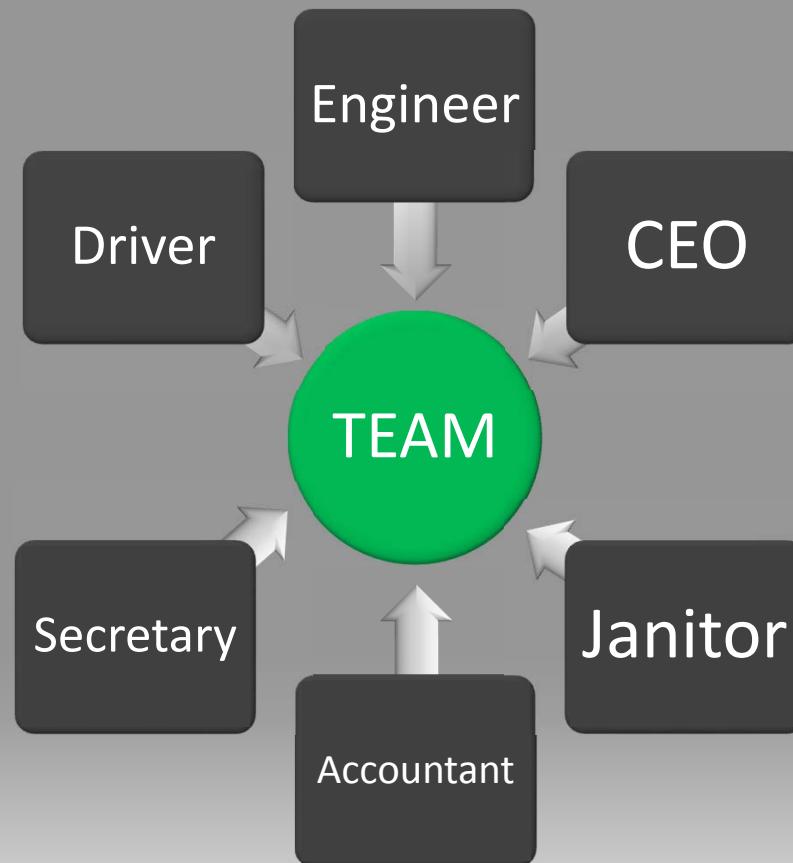
- Risk

You need to take more risk than others. Risk is an important factor that every entrepreneur will consider. If you are not willing to take the risk on yourself, how can you expect anyone to believe in you?

The landscape may change but your values must stay the same

TEAM

You are the:



Be ready and willing to do everything yourself at every stage of development

TEAM

Important:

- A.) Respect is earned, not demanded.
- B.) Focus on “What is in it for them?” for your employees.
- C.) Surround yourself by those that will challenge you.
- D.) Know your strengths and weaknesses and build your team accordingly.

Your success depends on your team!

EQUIP YOURSELF WITH:

- What necessary tools helped you along the way:
 - Talented people
 - Immense skill set
 - Networks
 - Family

Putting together a team of talented people with an immense skill set is only part of the needs for any small business. Relying on your networks of individuals and family to support you is also necessary for success.

Look beyond the basic skill set of a potential employee

SMALL BUSINESS ECONOMICS

- What is the best way to raise money for my small business? *Never the same answer*
- What portion of the company's money should be considered yours? *0%*
- How should my company invest the money it makes? *Invest in various portfolios of assets, technology, people and community outreach*

Focus the income of your business on growth

CHALLENGES

What challenges did you encounter?

- Safety Net Money VS. Reinvestment
- Audits and Inspections
- Uncontrolled Growth
- Intellectual Property
- Conflict of Interest

Challenges and perceived failures provide opportunities to succeed

INTELLECTUAL PROPERTY

- Everyone will need to address it **AND** manage it
- IP needs to be kept confidential and protected BUT it must be discussed openly with all parties involved
- Depending on the University they have different policies
- Ownership of the IP belongs to where you are working
- You need to have a plan

Open and fair discussion with all parties involved

MANAGING POSSIBLE CONFLICT OF INTEREST

- There will be potential conflict of interest when commercializing your research
- If you are employed at University as well as outside, you need to have an open conversation to establish a “conflict of interest” management plan
- Implement structures so that your situation can be beneficial to parties
- Ensure that those who report to you have independent mentors/counselors to discuss their progress and concerns

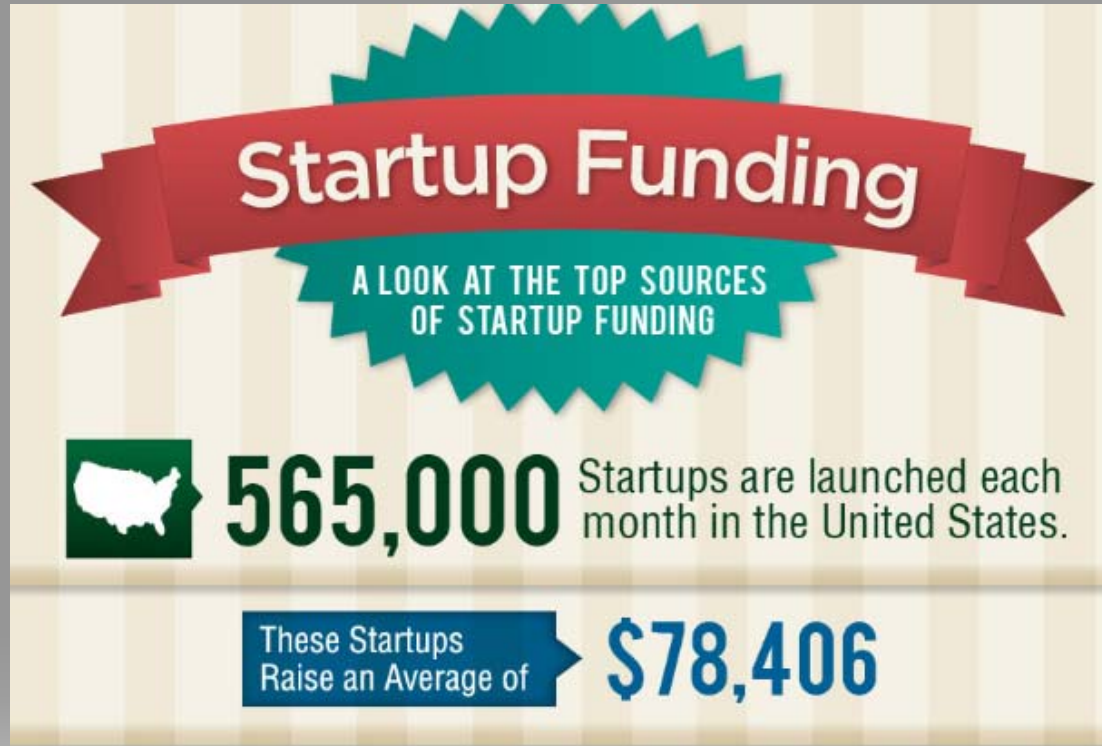
“Conflict of Interest” – if you can’t avoid it, manage it

WHAT ARE YOUR FUNDING OPTIONS?

- Government or NGO funding such as government R&D contracts and grants
- Your own savings (“bootstrapping”!!)
- Friends and family
- Angel-investor funding (\$100k+)
- Venture Capital (\$1 million+)
- University support (incubators, free space, lab usage, etc.)
- Crowd funding
- Collaboration/partnership
- Bank loans (interest)

Invest in yourself before you expect others to invest in you

WHAT ARE YOUR FUNDING OPTIONS?



SOURCES:

Center for Venture Research, US Small Business Administration, Angel Resource Institute, Angel Capital Education Foundation



WHAT ARE YOUR FUNDING OPTIONS?

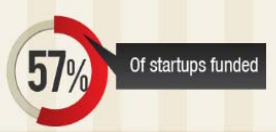
FRIENDS & FAMILY Friends & Family invest the most in startups, investing over \$60BB per year.

\$23,000
Avg. Amount invested



PERSONAL SAVING & CREDIT The majority of startups are funded largely in part by an entrepreneur's personal savings and credit.

\$48,000
Avg. Amount invested



SOURCES:

Center for Venture Research, US Small Business Administration, Angel Resource Institute, Angel Capital Education Foundation



BANKS The SBA backs just under 100,000 bank loans per year to small businesses.

\$143,899
Avg. amount loaned



ANGEL INVESTORS Angel Investors write 16x more checks than VC's, investing in over 61,900 companies per year.

\$74,955
Avg. Amount invested



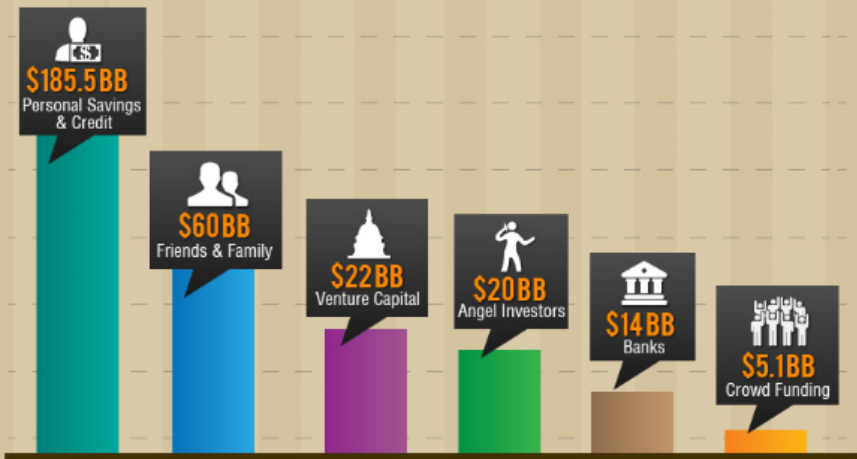
VENTURE CAPITAL VC's write the biggest checks with an average investment size of \$2.6MM to seed stage companies.

\$5.94MM
Avg. Amount invested



TOTALING \$531BB+ PER YEAR

Top Funding Sources



FINAL THOUGHTS

- Have a mission, vision; and know your core values as they will guide you in your most challenging times.
- If you believe in your product, you should be willing to shoulder the risk
- Be ready and willing to do everything yourself at every stage; surround yourself with people better than yourself
- Invest your money in your company; assume 0% of the company money is yours.
- Recognize the importance of the support of your family and community.

THANK YOU!

Please feel free to reach out to me with any additional questions or comments! You can get in touch with me through the email addresses provided below:

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Questions ?

UIC UNIVERSITY OF ILLINOIS
AT CHICAGO

