COMMERCIALIZATION OF RESEARCH

Examples from Industry and University

OUTLINE OF PRESENTATION

- Xerox PARC, 1979-83; 1983-88
- SynOptics
- Stanford University
- Silicon Graphics
- Lessons
- A suggestion

WHY REVIEW COMMERCIALIZATION OF RESEARCH AND TECHNOLOGY?

- Job creation
- Economic growth

XEROX PARC 1979-83

- 3Com
- VLSI
- GriD
- Metaphor
- Komag
- Adobe

XEROX PARC 1983-88

- Spectra Diode Labs
- SynOptics
- ParcPlace Systems
- Microlytics

SYNOPTICS

- Founded in 1984
- Andy Ludwick and Ron Schmidt
- Local Area Networks
- Xerox ownership, 15%
- Merged into Bay Networks $2.7 Billion
- Purchased by Nortel 1998 $9.1 Billion
- Acquired by Avaya 2009

STANFORD UNIVERSITY

- Google
- Yahoo!
- Cisco
- MIPS
- SUN
- Silicon Graphics
- Many others

SILICON GRAPHICS

- Founded by Jim Clark
- VLSI design course
- Geometry Engine fabbed at Xerox PARC
- Early development of 3D graphics
- Technology used in several hit movies
- Market value exceeds $1 billion

LESSONS

- There is no formula, recipe or equation that will guarantee successful commercialization of research or technology

LESSONS

- There is no formula, recipe or equation that will guarantee successful commercialization of research or technology, however;

- There are guidelines based on experience that can increase the probability of successful commercialization.

LESSONS

- No formula guarantees success
- Identify and commit right people
- Provide a supportive and entrepreneurial environment
- Treat failure as a lesson
- Don’t micromanage the project
- Several others

A SUGGESTON

- Set up a mechanism for further nurturing cooperation and information exchange between Universities and Industry in Taiwan

SUGGESTION STRUCTURE

- 5-10 companies supporting university research
- Taiwan government matching funds
- Notable person for CEO
- Best universities for grants
- New start-ups major objective
- Visiting scientists and engineers
- Summer and sabbatical programs
- Evaluate after four years

ONE MORE POINT

- Set up a mechanism for further nurturing cooperation and information exchange between universities and industry in Taiwan
- SEMATECH and SRC may offer some lessons in how university/industry cooperation can occur with government support