


media X
at Stanford University

Facilitate, Connect, Innovate

Silicon Valley's Flexible Networks

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The Frog Metaphor




Changing Media

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The Vanishing Media




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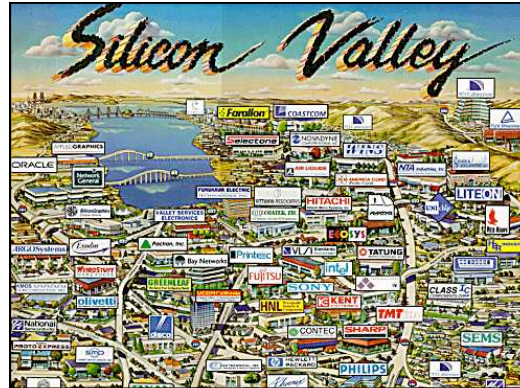
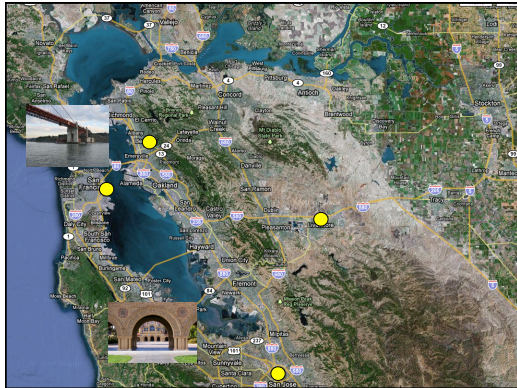
Apple



Innovation and technology transfer are people to people activities

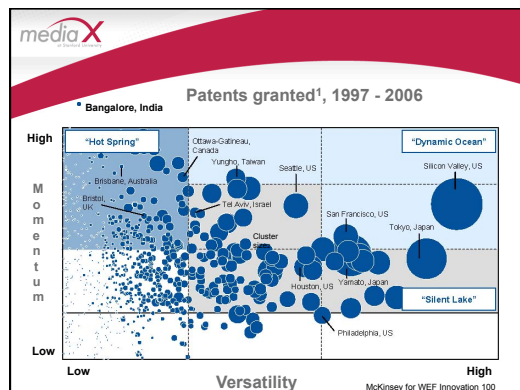


Something for us to do?



media X Silicon Valley

- A regional network-based industrial system that promotes collective learning and flexible adjustment among specialist producers of complex technologies
- Characterized by
 - Dense social networks
 - Open labor economics
 - Porous functional boundaries
 - Welcome the second (3rd, 4th, etc.) chance
 - Vigorous innovation




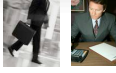
media X Silicon Valley

"People change jobs here without even changing car pools."

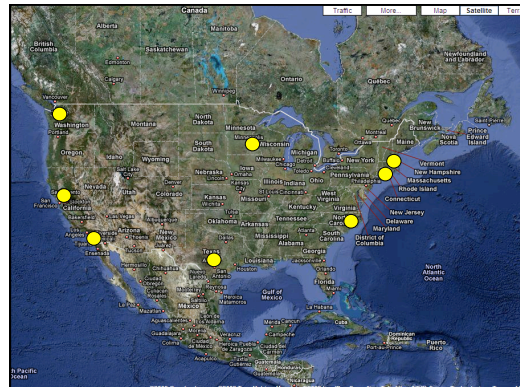
"You could quit your job on Friday and have another one on Monday. You didn't even have to tell you wife. You just drove off in another direction on Monday. You didn't have to sell your house. Your kids didn't even have to change schools."

The region's economic power is a product of its past as well as its present, of military contracts as well as venture capital. Silicon Valley is an economically mature region whose childhood and adolescence were paid for by U.S. tax dollars - adaptation occurred on this foundation.


media X Two different industrial systems


<ul style="list-style-type: none"> ▪ Silicon Valley ▪ Apricots & walnuts ▪ Geo concentrated ▪ Center of semiconductor ▪ Laid back ▪ Decentralized, fluid ▪ Horizontal ▪ Many small firms ▪ Risk-tolerant ▪ Status = Technical merit 	<ul style="list-style-type: none"> ▪ Route #128 ▪ Industry base ▪ Geo scattered ▪ Center of computer ▪ Buttoned up ▪ Puritanical, boundaries ▪ Vertical ▪ Few large firms ▪ Risk averse ▪ Status = Corp hierarchy
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media X Guiding Principle



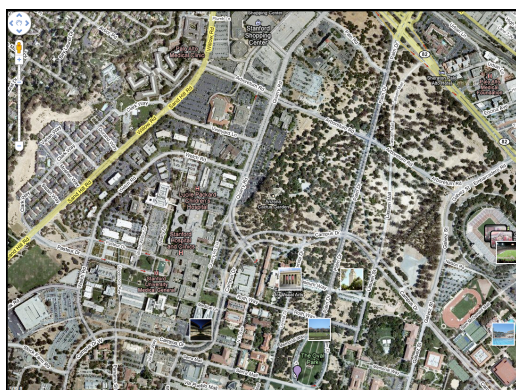
or



media X **H-STAR**
HUMAN SCIENCES AND TECHNOLOGIES
ADVANCED RESEARCH INSTITUTE

RESEARCH FOCUS

Research on **people and technology** — how people **use** technology, how to better **design** technology to make it more usable, how technology **affects** people's lives, and the **innovative use** of technologies in research, education, art, business, commerce, entertainment, communication, security, and other walks of life.

media X H-STAR
HUMAN SCIENCES AND TECHNOLOGIES
ADVANCED RESEARCH INSTITUTE

Stanford Facts

Seven schools: Earth Sciences, Education, Engineering, Graduate School of Business, Humanities and Sciences, Law, Medicine

- 1,771 regular academic faculty
- 6,705 undergraduate students from 68 countries
- 8,176 graduate students from 95 countries


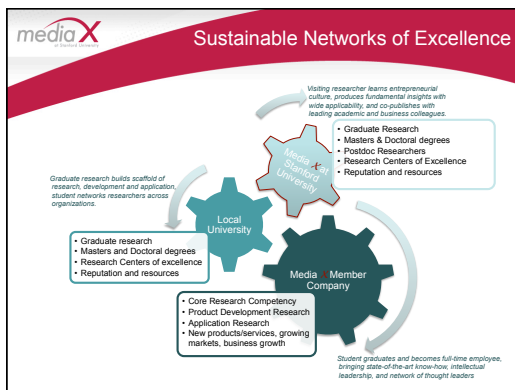
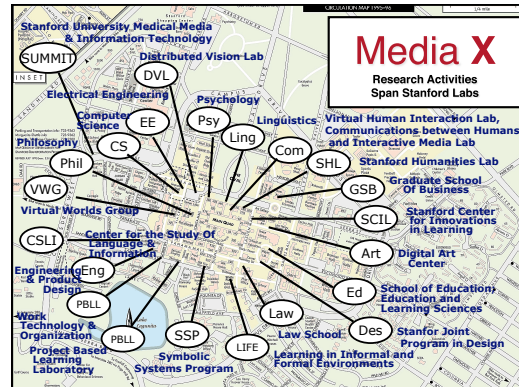
9 independent laboratories/centers

- Several national research centers (CASAS, NBER, SLAQ)
- 4,500+ externally sponsored research projects
- Budget for sponsored research: \$975 million
- 87% from government sources
- ~\$12 million in firm co-sponsors, foundations and individuals

Media X sponsors X-dept X-discipline research on IT and people questions

- 5 Professional Schools, all ranked in Top Ten
- Few other Univ have all 5, no other has 5 in Top Ten

Entrepreneurial Tradition and Culture

- media X** MEDIA X THEMES
- COLLABORATION**
 - Advanced communication technologies. Exploring the fusion of virtual and physical worlds for advanced human communications.
 - Integrating technologies for social interaction and collaboration. Using interactive technology in social interaction and collaboration in production contexts, including synchronous and asynchronous use of text, graphics, voice and video.
 - Mobile devices in collaboration. Researching mobile device-centric interactive technology used in collaboration in the context of fieldwork.
 - HUMAN-MACHINE INTERACTION AND SENSING**
 - Human-machine interaction and sensing. Research on human-machine interaction and sensing that focuses on the detection or sensing of human-computer interaction, emotional states, gestures or touch.
 - Sensing and control. The integration of robotics and the understanding of human psychology and social behavior that can lead to new technologies that enable natural interaction with information and the physical world.
 - Sensing attention from other sources of social attention. Enabling vehicles to automatically perceive driver emotions and determine the driver's alertness/fatigue in order to provide a reliable and actionable safety index.
 - PARTICIPATION**
 - Custom media creation. Evaluating consumers as publishers or creation enablers of content.
 - Language and history. Analyzing technologies leading to learning and learning, focusing on the integration of technology and an understanding of human psychology and social behavior to enhance understanding and performance.
 - IMAGE, SPEECH AND LANGUAGE PROCESSING**
 - Visual communication. Basic and strategic research, training and technology transfer in speech and language processing.
 - Video processing, understanding, and reuse. Using interactive technologies related to video processing, cataloging, retrieval and reuse, with a view to the development of automated systems to support video libraries.
 - FORM FACTORS**
 - Mobile phone and wireless form factors. Researching mobile communication devices and services focusing on the device itself, the use of the device, the user interface, the device usage, and the connectivity opportunities and needs required to make the device part of the "connected" computing ecosystem.

- media X** Media X Initiatives
- Participation**
 - Expression, incl. CGC
 - Personalization
 - Democracy
 - Abilities-disabilities
 - Collaboration**
 - Program development
 - Community
 - Decision making
 - Co-creation
 - Distant work teams
 - Technologies**
 - Visualization software & processes
 - High-bandwidth digital – voice, text, video
 - Semantic, incl. data & platforms
 - Ubiquitous, incl. mobile
 - Virtual and real
 - Messy Problems**
 - Health, incl. hunger
 - Environment
 - Education
 - Meaning, semantics

media X Members Provide the Direction



The CTO Forum

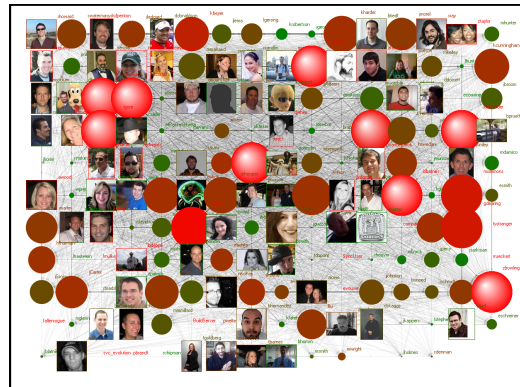
media X The Unfinished Revolution

The knowledge revolution

Collaboration with communication technologies

Advantage through collective, connective, distributed intelligence

Flexible networks



media X Participate in Media X

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- Membership
- Visiting Researchers
- Research Initiatives
- Workshops
- Seminars
- Wallenberg Summer Institute