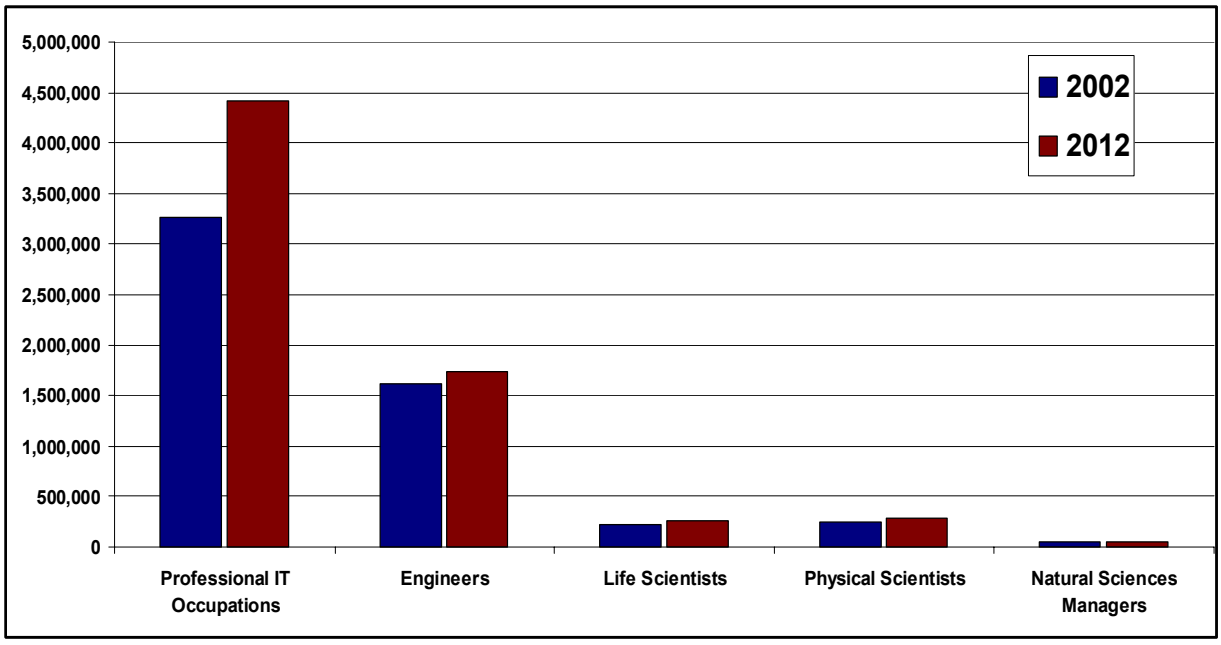
ANITA BORG INSTITUTE
FOR WOMEN AND TECHNOLOGY

The State of Representation of Technical Women in Industry

Information Technology, Science and Engineering Occupational Projections, 2002-2012[1]

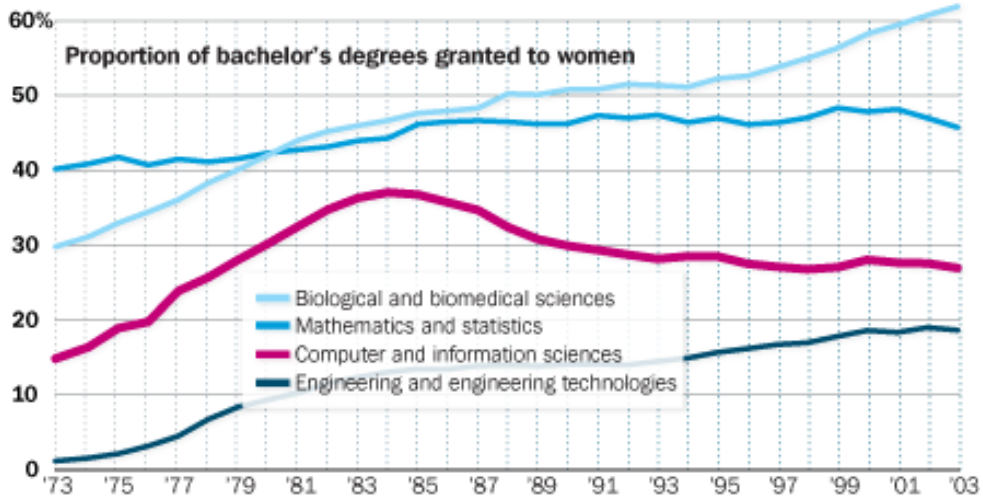


- **1,500,000**: number of computer and information related jobs expected to be added to US workforce by 2012
- Percent of these jobs of which US universities will graduate qualified candidates **50%**

The pipeline at the university level

- **Women who earn bachelor's degrees in Comp Science: 28%**
- **Women who go on to get PhD: 16.5%**
- **Women who hold professional positions in IT industry in 2006: 26%**

[1] US Department of Education

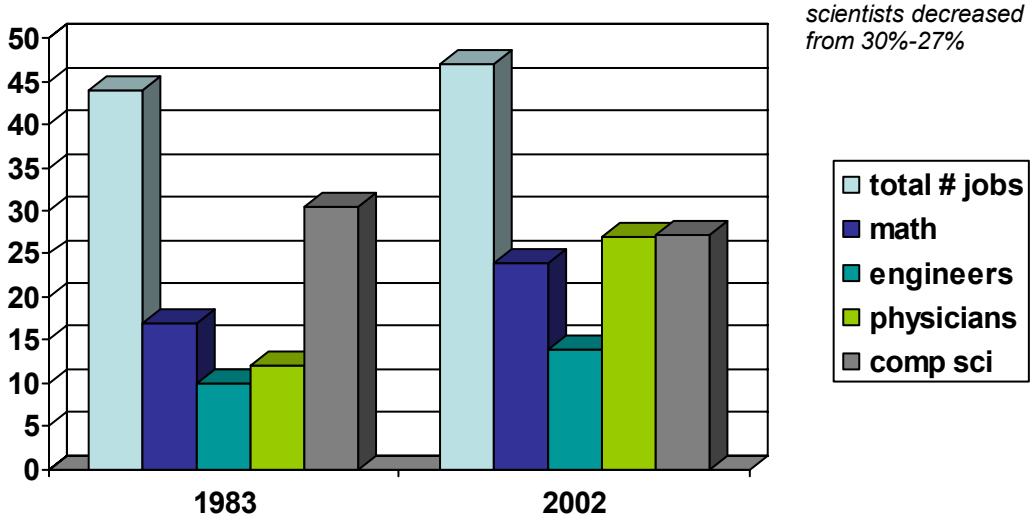


Source: US Dept of Education

- The proportion of women in computer and information sciences has decreased in the past 20 years, especially compared with other fields in mathematics and sciences[2].

Percentage of Jobs Held by Women, US

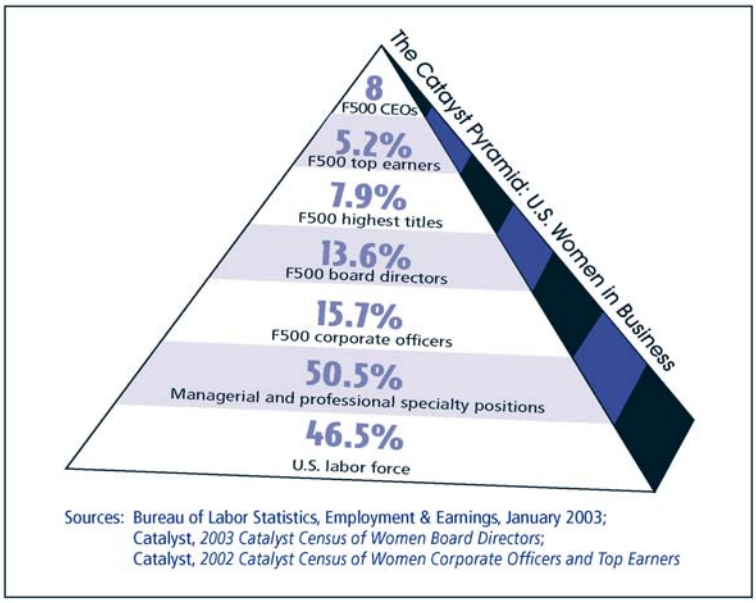
All areas increased except computer scientists decreased from 30%-27%



[2] US Department of Education

ANITA BORG INSTITUTE
FOR WOMEN AND TECHNOLOGY

Women in Corporate America



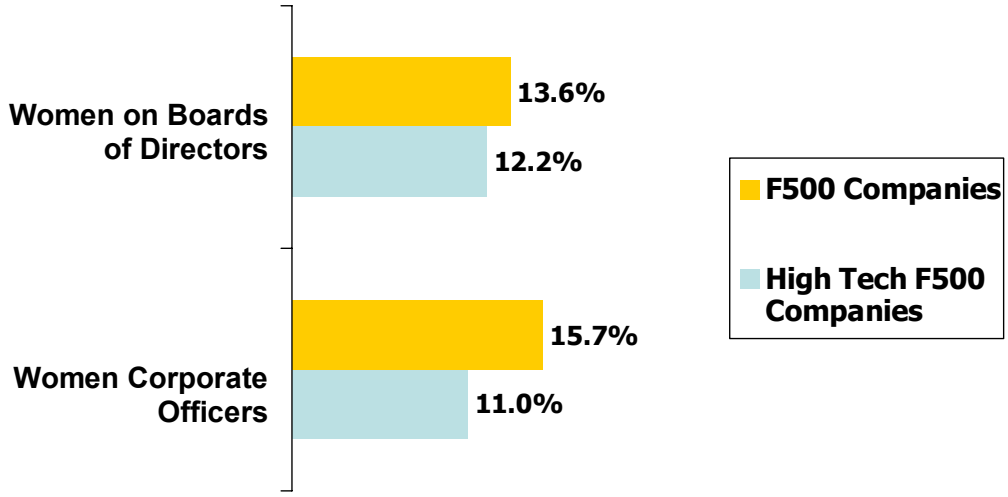
Women on the High-Tech industry Ladder

- Most studies put the number of women in senior management positions in technology companies around 3% to 5%, a number which has remained unchanged over time.[3][4][5][6]
- The proportion of women in technology positions in industry in the US has declined from 41 percent in 1996 to 32 percent in 2004[7].

[3] Shuttleworth, T. (1992). "Women and computer technology: Have the promises of equal opportunities been fulfilled?" Women in Management Review **7**: 24-30.
[4] Myers, K. (1990). "Cracking the glass ceiling: despite some high-profile grains, women executives in IS remain a rare phenomenon." Information Week **38**: 284.
[5] Benditt, J. (1992). "Women in Science -- Pieces of a Puzzle." Science **255**.
[6] Catalyst (2003). Bit by Bit: Catalyst's Guide to Women in High-Tech Companies. New York, Catalyst.
[7] Information Technology Association of America, 2005

ANITA BORG INSTITUTE
FOR WOMEN AND TECHNOLOGY

Women in Leadership Positions: High Tech Industry



In 2002, Women represented[8]

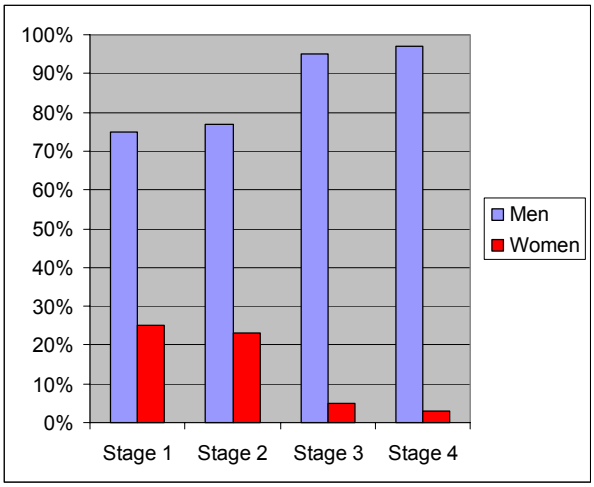
- 12.2% board directors of public high tech corporate boards
- 11% of corporate officers and top earners in the high tech industry
    - In 2006, the percentage of women corporate officers in Fortune 500 Companies was at 15.6%, reflecting very little change since 2002.[9] The number of women corporate officers in the technology sector was at 13%, a slight increase[10].

[8] Catalyst, 2003 Catalyst Census of Women Board of Directors. Catalyst, 2002 Catalyst Census of Women Corporate Officers and Top Earners
[9] Catalyst 2006 Census of Women in Fortune 500 Corporate Officer and Board Positions
[10] NCWIT By The Numbers publication

The numbers at different Career Stages

- Studies of technical careers in various industries have identified 4 archetypical career stages [11,12,13]. Those 4 steps have been broadly defined as[14]:
  - *Apprenticeship (Step 1, entry level):* Works under supervision and demonstrates competence as a part of a larger project
  - *Individual Contributor (Step 2, mid-level):* Responsible for defined projects, works independently, increased technical competence and reputation, develops a network
  - *Mentoring, Contributing through others (Step 3, Senior level):* Increased technical impact. Acts as a mentor, manager, or leader for stages 1 and 2. Represents the group/project within organization. Broader business perspective
  - *Setting strategic direction of organization (Step 4, Executive level):* Represents organization and vision to external and internal constituents. Power and influence in the name of the organization. Prepares future leaders.

- The proportion of women in technical careers drops significantly at stages 3 and 4, from 20% at the first stages to less than 3% at the highest stage[15] .



The Anita Borg Institute for Women and Technology: www.anitaborg.org

[11] Dalton, G. W. and P. H. Thompson (1986). Novations: Strategies for Career Management. Glenview, Scott, Foresman and Company.

[12] Dalton, G. W., P. H. Thompson, et al. (1977). "The Four Stages of Professional Careers - A New Look at Performance by Professionals." Organizational Dynamics **6**: 19-44.

[13;14;15] Younger, J. and K. Sandholtz (1997). "Helping R&D Professionals Build Successful Careers." Research-Technology Management(November-December): 23-28.