Women in Technology
Leadership Round Table
Spring 2018 Event Summary

OVERVIEW

On June 8, leaders from the tech industry, academia, and nonprofit sector convened at UC Berkeley for the sixth semi-annual Women in Technology (WiT) Leadership Round Table. The discussion continued to focus on advancing the adoption of standardized and meaningful diversity metrics by companies. This is part of an ongoing effort to persuade organizations to “face the data” regarding the lack of diversity, a theme that emerged from the inaugural Round Table event in Fall 2015. Previous reports summarized recommendations for metrics to monitor and track progress: 2016 Reports and 2017 Reports.

The day began with WITI@UC co-founders Tsu-Jae King Liu, Dean of the College of Engineering at UC Berkeley, and Camille Crittenden, Deputy Director of CITRIS and the Banatao Institute, sharing the mission and goals of the initiative.
Mission - We aim to increase the persistence and success of women in technical fields in industry, academia, and the public sector.

Goals - Equitable participation of women as benchmarked against the participation of men in the tech industry:

- Career longevity
- Career progression: attainment of senior leadership positions
- Career pathways - strengthening the “pipeline” for women to serve in technological roles and achieve leadership positions
- Career recognition - equal compensation and advancement opportunities; awards; corporate and editorial board seats

The June 2018 agenda followed up on the two recommendations from previous Round Tables: Encouraging groups to collect and track metrics regarding women in technology; and encouraging women to be bold and tell their stories.

The 2017 Round Table reached consensus on a minimum set of metrics and charted a course of action to facilitate the broad adoption to move towards a goal of 25% representation of women in the U.S. technical workforce by the year 2025. This effort is a result of the members recognizing the need for increased awareness of issues and best practices in addition to the adoption of meaningful diversity metrics. The recommended set of metrics are below:

1. Percentages of women in entry-level, mid-career and senior-level positions
2. Percentage of female hires relative to all hires
3. Percentages of women promoted relative to all promotions
4. Percentage of women promoted to leadership roles vs. all such promotions
5. Percentage of women vs. men who leave the organization (3-year period)

Session I: Improving Inclusion

During the first session, several organizations shared their efforts and initiatives to collect and report on data.

Andrea Goldsmith, Professor of Electrical Engineering at Stanford University, began by outlining the importance of diversity and shared some of the current metrics, illuminating the issues of underrepresentation. Diverse organizations are more creative, perform better, and have higher satisfaction of their members. Andrea leads a Committee on Diversity and Inclusion within the Technical Activities Board (TAB) at IEEE, the world’s largest technical professional organization for the advancement of technology ("IEEE and its members inspire a global community to innovate for a better tomorrow through highly cited publications, conferences, technology standards, and professional and educational activities. IEEE is the
trusted “voice” for engineering, computing, and technology information around the globe.”)
IEEE could be a role model for the profession, which is currently struggling to attract and retain diverse representation among its members.

⇒ Among IEEE membership, % of women (self-report): All member grades (12.1%); Student members (30.3%), Graduate Student Members (8.8%), Members (8.7%), Senior members (7.8%), Fellows: (4.4%)
⇒ Overall enrollments, women are 12% of EE (electrical engineering) undergraduates, 16% of EE professors, 13% of EE workforce

We may see similar statistics with other underrepresented groups, but that data is currently not collected. Similarly, the number of women awarded IEEE-wide awards or within societies is strikingly low nearing the single digits for both nominations and winners.

*IEEE Survey Infographic (2018)*

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**Women’s Experiences in Tech**

In a recent IEEE survey, 4,579 women responded to questions on being a woman in tech. The detailed findings reveal discouraging experiences and perceptions within the industry.

Many women experienced the same negative incidents at alarmingly high rates...

- 71% said questions or comments were addressed to males when questions should have been addressed to her
- 58% were asked inappropriate questions during interviews
- 39% were assigned lower-level tasks
- 37% were excluded from networking opportunities
- 73% have experienced negative outcomes in their careers attributed to being a woman

- 28% have experienced unwanted sexual advances
  - 86% from colleagues
  - 58% from a superior
  - 45% from a client
Currently 12% of electrical engineering undergraduates are women. This provides IEEE a prime opportunity to improve retention rates and provide the same benefits for all members therefore benefiting the next generation of women and URM technologists. Diversity is important to IEEE and much remains to be done to address the consistently low number of women represented as distinguished lecturers, members of leadership teams and committees, and award winners.

Andrea shared some of the initiatives created by the ad hoc committee IEEE formed in 2015 for women and other underrepresented groups. The committee aims to develop strategies to increase engagement and representation of Women and UGs on committees and Boards of TAB, Societies, and Councils, ensure inclusive recognition of achievements, and identify barriers to representation/inclusion to suggest improvements.

Next, Allison Scott, Chief Research Officer at the Kapor Center presented findings from their report, “The Leaky Tech Pipeline: A Comprehensive Framework for Understanding and Addressing the Lack of Diversity across the Tech Ecosystem.” The report includes data across the entire pipeline, from Pre-K to 12, higher education, the tech workforce, and entrepreneurship. The report highlights key findings for each segment. Notably in the workforce, the report found that leadership roles in tech companies are 83% White, and 80% male, shown in Figure 1.

![Figure 1: Employment in Leadership Positions in Tech, by Race and Gender (Kapor Center 2017) Data Source: EEOC (2016)](image)

After the report the Kapor Center issued a list of six recommendations:

1. Increase Equity in K-12 Education
2. Expand Computer Science Education
3. Enhance Pathways into Technology Careers
4. Implement Comprehensive D&I Strategies within Companies
5. Increase the Prevalence of Diverse Computing Role Models
As of summer 2018, the Kapor Center is launching a new Women of Color in Computing: Researcher-Practitioner Collaborative, which aims to build a body of literature on women of color in computing and develop, test, and scale strategies for improving outcomes for women of color across the tech ecosystem. The program will conduct research and disseminate data regarding trends among women of color in computing education and career pathways, barriers to participation in computing among women of color, and innovative and effective interventions and strategies to increase participation.

Women Entrepreneurs

Gitanjali Swamy, Managing Partner at IoTask, led a discussion over lunch examining how diversity and inclusion can lead to better investment returns. Recent studies by McKinsey show that greater diversity leads to greater innovation with 19% greater innovation revenue (refers to the revenue a company has generated from new or enhanced products in the past three fiscal years) and increased financial performance of 15%-35% greater. (Source: McKinsey Diversity Database, 2016).
Although the data shows diverse teams increase performance, women still receive limited venture capital as CEOs and founders. Only 3% of women CEOs have venture-funded businesses and represent only 1.3% of founders (see Figure 2). Some reasons for this disparity could be unconscious bias, lack of networks, or predatory behavior. Another related finding is that women's entrepreneurial funding is concentrated in early seed stage investment with less than $500k total funding. Taking a closer look, Swamy collected data the *Predators in the Board Room? Relating Sexually Predatory, Discriminatory Behavior to Private Capital Performance* white paper, to determine if inclusive firms, those without predatory behavior, result in better investments. The initial results show that predatory practices are strongly correlated with poorer investment returns.

Session II: Facing the Data

The second session started with Jonathan Davis, Global Vice President, Advocacy, sharing his work at SEMI. The organization's mission is to provide industry stewardship and engage members to advance the interests of the global electronics manufacturing supply chain. Its vision is to promote the development of the global electronics manufacturing supply chain and positively influence the growth and prosperity of its members. SEMI advances the mutual business interests of its membership and promotes a free and open global marketplace.

During the Fall 2017 Round Table, Leslie Tugman, Executive Director at SEMI Foundation, offered to engage member companies of SEMI and include questions suggested by the WiT Leadership Round Table in SEMI’s annual membership survey to determine how many companies have adopted metrics in the aforementioned recommended set. Jonathan presented results of the survey that gathered input from semiconductor industry companies to identify key talent trends, best practices and workforce-related needs of SEMI member firms. The survey includes 80 questions and covers a variety of topics including: demographic information, workforce distribution, attracting talent, campus recruiting, employee engagement, diversity and inclusion, learning, workforce and workplace of the future, organization's HR investment.

SEMI identified the problem statement to be that industry prosperity depends on a high skilled innovative workforce, an increased demand for talent and challenges with the supply of workers requires industry-wide attention, with reportedly 1,000s of unfilled positions.
Sample survey questions:

**Which of the following metrics do you track today? (Check all that apply)**
- % of women in Senior-level, Mid-level, and Entry-level positions
- % of women promoted relative to all promotions
- % of women hires relative to all hires
- % of women promoted to leadership roles relative to all such promotions
- % of women vs. men who leave the organization over a 3-year period

**Which of the aforementioned metrics do you publicly disclose today? (Check all that apply)**
- % of women in Senior-level, Mid-level, and Entry-level positions
- % of women promoted relative to all promotions
- % of women hires relative to all hires
- % of women promoted to leadership roles relative to all such promotions
- % of women vs. men who leave the organization over a 3-year period

The survey showed that companies track metrics such as the percentage of women promoted relative to all promotions throughout the companies (24%), and the percentage of women hires relative to all hires (32%). The survey also showed that among the companies surveyed, only 30% disclose these statistics publicly. The semiconductor industry is now in great need of a skilled workforce, and engaging underrepresented members of the population is crucial to addressing this need and increasing productivity. In response, they want to create a comprehensive program to increase the number, retention and advancement of women employed in the semiconductor and associated industries. Mentorship, leadership participation and other programs and partnerships are part of the plan to engage more women and minority groups in the semiconductor sector.

Michelle Settecase, a Senior Analyst at Ernst and Young, spoke about the **Women, Fast forward** initiative, which serves to connect all aspects of the firm's go-to-market activities around gender equity, amplifying efforts of existing networks, influencing policy, original thought leadership and perspectives, collaborating with global talent, corporate responsibility, alumni and procurement, and enabling discussions with clients.
Their three pillars of research and insight are:

**Inclusive Growth**
- Women Entrepreneurs
- Social Entrepreneurs
- Gender-oriented policies

**Financial Inclusion**
- Greater access to financial products
- Greater usage of financial products
- Multi-account usage

**Digital Inclusion**
- Greater access to technologies
- Women in STEM
- Women AND tech

Women are subjected to high levels of unconscious bias, especially when it comes to technology, from the terms used in industry jargon to not being involved in the designing products and apps that are marketed to women. This disparity was demonstrated in the presentation by Amy Cross, Founder of Gender Fair, a certification created to inform customers, employees and investors about which companies are advancing gender equality, and to inspire them to support those companies in the marketplace. Cross remarked on the lack of even one C-level woman in the shoe industry, for example.

**NEXT STEPS**

At the close of every Round Table, attendees suggest topics for the next Round Table event. Suggested discussion topics included: how to best support and encourage women to pursue business and entrepreneurship, how to standardize metrics to measure success across different organizations, hearing what programs organizations already have in place to encourage a more diverse workforce, to learn more about what works and what doesn’t, and how to make intersectionality more part of the conversation.

Direct action items included: Michelle Settecase, at Women.fast forward, Ernst and Young, committed to following up with speakers and attendees to see how to best share information from EY’s vast resources and convening power to engage with a greater number of corporate partners. Michelle has since reached out to WITI@UC with the opportunity to speak with Dr. Talmesha Richards who leads the Million Women Mentors programs associated with STEMConnector (an advocacy and professional network for women in STEM). EY’s research has shown that women change their career goals within the first 5-7 years of work and are primarily affected by their line managers during this time. Having a strong mentor who can offset or outright counter messaging that would steer women away from stretch career goals could be a key differentiator for many.

The Fall 2018 Round Table is scheduled for December 7, 2018, in Santa Clara. All past participants of the WiT Leadership Round Tables are cordially invited.