

## More Gender Diversity in Cybersecurity Will Yield Big Payoffs for Organizations and Women



### **Deborah Hurley**

Creator of ISO 2700  
Professor at Harvard University  
and Brown University

“From my point of view the situation for women in IT, including cybersecurity, is dire,” said Hurley. She cites three inter-related problems that combine to disadvantage women and to reduce opportunities and payoffs for organizations.

### **1. WOMEN AND GIRLS SELF-SELECT OUT OF MATH AND SCIENCE**

“Although the new field of computer science stimulated an initial blip of interest from women, women’s participation in math and science since then has continued a precipitous decline. By middle school, girls are opting out of these important, interesting, growing areas of study and economic activity.”

### **2. MISSING OUT ON BIGGEST ENGINES OF WEALTH CREATION**

“The situation assumes disastrous proportions when you consider that, by self-selecting out of science and technology, women have closed themselves off from the biggest engines of wealth creation in our era. Compounding this already shocking state, the number of single-parent families is growing in the United States. ‘Single-parent families’ is a euphemism for women raising their children by themselves. So, the women AND their children are excluded from wealth creation. That is a tragedy.”

### **3. WHILE WOMEN IN IT ENCOUNTER A CLIFF OF DISCRIMINATION**

“The women who do go into science and technology fields encounter a virtually all-male environment or a cliff of discrimination. The percentage of women in Silicon Valley is miniscule, compared with the fact that women are 50% of the population. There are numerous other examples, such as Gamergate. Some women drop out. Others hang in there, but do not receive the same recognition, training or opportunities as their male colleagues.”

There are counterpoints to these dismal trends, such as the relatively new field of the Chief Privacy Officer. (A 2014 International Association of Privacy Professionals survey of 1000 Chief Privacy Officers found that 48 percent were women.) Hurley said, “This is an emerging

field that has attracted women. They work on privacy and data protection and engage with many technology-related issues. The CPO often must work closely with the cybersecurity team.”

Hurley thinks that there are many opportunities to engage more women in information security, which is inherently interdisciplinary and multistakeholder. She would know. In 1990 Hurley wrote the first comprehensive report on information security. Prior to that, only technical manuals existed. “My report was the first time we looked at information security across disciplines, including technical, management, legal and other issues,” said Hurley.

She continued, “In order to address cybersecurity problems in a robust, sustainable manner, it is essential to confront them in an interdisciplinary way, pulling what’s best and the needed tools from the entire arsenal, whether they be technical, legal, management or other, and to use them in combination to meet the security challenge. People from diverse backgrounds have to come together to solve cybersecurity problems. The ability to get along with, bring together, supervise, and get results from a broad range of people is a vital skill. Further, it is useful to be able to understand and manage human and social behavior among employees, customers and clients, and the public at large.”

Hurley pointed out that many cybersecurity problems have little to no technical component. She said, “The biggest cybersecurity problems come from human beings. The effective management and training of people is essential. When we talk about human vulnerabilities, the popular imagination runs to malicious hackers and cybercriminals. They exist and are a problem. But, in fact, the biggest cybersecurity issues come from employees, not the disgruntled ones, but employees who are well-intentioned but are fatigued, negligent or insufficiently trained.”

Cybersecurity is a growing field with lots of jobs and opportunities. Hurley strongly encourages women to take a look. Whatever a woman’s talents – with people, administration, management, education, technology or law – there is likely an aspect of cybersecurity for which her skills and expertise are needed. In addressing cybersecurity issues and in working with colleagues from many disciplines, which will be a daily part of life, these women will grow in knowledge and experience, thereby making themselves more expert and more able to contribute to their workplace, the economy, and society.

See our recent profile of Deborah:  
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