Creating Diversity & Equity for Women & Minorities in Information Security

Diversity 2.0

Marceline Cook
Mobile Endpoint Information Security & Gender Equity Analyst, BC Government
“Pale, male, stale”

Sophie Harrison, Chief of Staff at Panaseer
In 1843, Ada Lovelace became the first computer programmer by designing the first computer algorithm, and explaining how it would work on Babbage’s proposed (but non-existent) Analytical Engine.

During World War II, in 1942, Hedy Lamarr invents the frequency-hopping technology that would later allow the invention of wireless signals like Wi-Fi and Bluetooth.

In 1945–46, Jean Bartik and five other women developed and codified many of the foundations of software programming while working on ENIAC (Electronic Numerical Integrator And Computer).

In 1952, Rear Admiral Grace Hopper created one of the world’s first compilers (in her spare time), creating COBOL.
“Every year there are 300,000 computer science graduates; 3 percent go into security. Out of that 3 percent, only 3 percent are minorities.”

Larry Whiteside, Executive vice president of the International Consortium of Minority Cyber Professionals
Approx. **30 percent women** in information technology at tech companies like Google, Twitter & Apple

2017 ISC² workforce study shows just **11 percent** of the information security workforce is women.

The combined percentages of African Americans and Hispanics in the field of cybersecurity totals less than **10 percent**.
3.5 million shortfall of IS staff by 2021

Cybersecurity Ventures
Diverse companies had 2.3 times higher cash flow per employee over a three-year period than non-diverse companies - Deloitte

Companies with diverse management are more likely to introduce new product innovations than their homogenous counterparts – Economic Geography Journal, London

Companies in the top quartile for racial and ethnic diversity are 35% more likely to have financial returns above their respective national industry medians - McKinsey Research
72% of all other employees said they would consider leaving their company to another with better diversity initiatives and programs Deloitte

75% of senior staff who responded to a 2017 survey by accounting firm Deloitte said they would consider leaving jobs for more diverse & inclusive organisations Deloitte

Inclusive decision-making and Inclusive execution teams performed 60% better than average Forbes

53% of millennial respondents say that if they could find the same role, they would join the organisation with the most diversity and inclusion Deloitte

Inclusive teams make better business decisions up to 87% of the time Cloverpop

Teams that follow an inclusive process make decisions 2X faster with 1/2 the meetings Cloverpop
Teams need to be culturally and intellectually diverse

Diverse solutions evolve a more robust outcome

If a team is all from the same background, and thinks in the same way, solutions may not evolve past their first inception
Diversity 1.0
Your Diversity Program ran into a problem and had to restart. We’re just collecting some error info from you, then we’ll do the same thing all over again.

If you’d like to know more, you can search online later for this error: PRIVILEGE_IN_THE_WORKPLACE
How to fail Diversity & Equity 101:

1. Make it mandatory
2. Talk about the law
3. Provide training to just managers
Create & implement a program without using diverse staff or diversity & equity experts

Having a non-diverse team make a decision that has to be executed by a diverse group, this combination underperforms by 15% - Forbes

A company lacking in gender and ethnic diversity is more likely to underperform their industry peers on profitability by 29% - McKinsey
A Diversity & Equity Program that works:

Allow staff to volunteer to join the Diversity & Equity program, & offer incentives

Do not use a Diversity & Equity program as a punishment
When new staff join have them participate in your organisations Diversity & Equity program

Use Diversity & Equity experts **not** HR
Diversity 2.0 places the focus on:

People
Self Awareness
Action
Move **people** to the **center** of your organisation’s **growth strategy**

**Leadership** must support diverse populations and **enable their growth & development** within the business

“**Growth strategies are becoming less about the business defining the individual and more about the individual defining the business.**” - Forbes
Concentrate on building a culture of diversity

“If we believe that everyone around us is trying hard to fight against stereotypes and prejudices, we’ll do the same.”

- Brian Welle, director of people analytics at Google
We all carry bias
The majority of us are actively trying to fight our bias
The bias you carry is not your fault
How you act on your bias is your responsibility
Diversity
Inclusion of a range of differences that make up humans

Equality
Equality through removing barriers to success

Inclusion
Making space for minorities
Diversity
The spectrum of differences that make up humans

Equity
Equality through affirmative action

Action
Actively including all humans, at all levels
Diversity is being invited to the party;

Inclusion is being asked to dance.
Diversity is when everyone can attend the same dance

Equity is everyone having the same opportunity to dance

Action is making sure those that want to dance can do so
Washing one's hands of the conflict between the powerful and the powerless means to side with the powerful, not to be neutral.

- Paulo Freire
At Information Security Conferences:

85% of women have experienced discrimination

50%+ of women have been sexually harassed

20th Annual Privacy & Security Conference:

Men are speaking 99 times
Women are speaking 49 times
All photographs used in this presentation are open source photographs of British Columbia, mostly taken on Vancouver Island.

ANY QUESTIONS?

marceline.cook@gov.bc.ca