



Women in innovation

Eight behavioural nudges to keep moving the dial forward

Innovation depends on diversity

In November 2017, [#movethedial](#), PwC Canada and MaRS released “Where’s The Dial Now?” to quantify the gender disparity in Canada’s tech sector. The results detailed what we deeply suspected: more work needs to be done to achieve equitable representation of women-identified people, especially at the senior level.

For the average tech company, only 13% of the executive team are women, and 53% of tech companies have no female executives at all. Women comprise only 8% of the boards of directors for Canadian tech, while 73% have no female board members. Only 5% of Canadian tech companies have a solo female CEO; when companies with male and female co-CEOs are factored in, this statistic increases to only 6%.

There are many reasons why these gaps are unacceptable, but here’s the simplest: women and girls make up approximately half of humanity. Not only is it plainly wrong to relegate them to the sidelines, but when innovating new products and solutions, ignoring the input and talent of half the population is neither wise nor sustainable. As PwC Canada Chief Innovation Officer Chris Dulny noted in the original report, “You don’t get to be the best in the world unless you have the best

people working on it in the country, and we simply don’t see how that happens if you don’t have diversity in thinkers, workers and leaders.”

Studies back up this claim—a [recent study](#) by the Harvard Business Review, for instance, showed that the most diverse enterprises were also the most innovative. The relationship between diversity and success can be seen in stronger product portfolios and higher innovation revenues.

Our original report looked at the tech sector in particular. Now, we’re widening the scope to look at how we can improve representation across industries—especially in the key roles related to science, technology, engineering and mathematics (STEM) that are driving Canada’s innovation economy.

That’s because today, innovation has become the common denominator for organizations across the board. [PwC Canada’s Vision to Reality Awards](#) demonstrate this well. Applicants come from a variety of industries and disciplines: 2018’s winners ranged from a construction company that has implemented cloud apps and data analytics on its job sites to a social service agency that has streamlined legal dispute resolution processes through digital technology.



“Technology is in everything that we do. It’s in every industry. I’ve been to many different conferences and we hear about restaurants of the future and hospitals of the future, and smart buildings, smart cities. And so I think every industry recognizes that to be truly competitive and to deliver as much value as possible for customers, consumers and patrons, technology is going to be that enabling factor.”

—Claudette McGowan

¹ The current literature around innovation industries typically regards “women” as a singular homogenous group, without a more nuanced understanding of intersectional identities. Therefore, while women in general are underrepresented in this space, the numbers cited in the research may not adequately reflect the gaps that persist in minority representation.

It's crucial we acknowledge that women are not a homogenous group and have different needs according to the many intersecting aspects of their identities. Further, gender can't be broken into simple binaries. It is within this context that we offer these behavioural changes; while we rely on binary language, we would like to stress that the term "women" includes anyone who self-identifies as such within this fluid and changing category. We seek to support all women-identified people looking to work or advance within the tech and innovation ecosystem so we can make strides toward equity across intersectional lines.

Despite barriers, there are many incredible women who are already moving the dial for diversity across sectors. And while change happens at all levels, it's the people in leadership positions who have a responsibility to drive the most powerful impact. We spoke to five innovative leaders on how to empower women and achieve gender equity in the workforce:

- **CJ Ritchie** is the Chief Information Officer for the Government of British Columbia, bringing innovative solutions to the public sector.
- **Gianna Manes** is President and CEO at ENMAX, delivering electricity, natural gas and renewable energy to Alberta.
- **Claudette McGowan** is the Chief Information Officer of Enterprise Technology Employee Experience at BMO, leading a large financial institution in its workplace transformation strategy.
- **Juggy Sihota** is VP Consumer Health at TELUS, overseeing Canada's leading providers of electronic healthcare records and resources.
- **Danielle Cerisano** is VP Finance at League Inc., changing how companies provide benefits and how employees engage with them.

Together, these five remarkable leaders are helping change the face of their industries. Through our conversations with these women, we arrived at eight actionable behavioural changes (or "nudges") that can help make innovation roles more accessible, welcoming and rewarding for women across all sectors.



Looking beyond STEM education

Before we focus on how to nudge the dial forward for women in the workforce, it's important to first look at their journeys as students. What are the barriers women and girls face in pursuing a STEM education? And is graduating from a STEM program still considered a prerequisite for a career in innovation?

From barriers to inspiration

For many women and girls, the challenges of going into a STEM field start early, with implicit and explicit gender biases from the media, family, educators and employers. Gender stereotypes can easily become internalized, negatively affecting girls' confidence in their studies and their performance on tests. This helps explain

why women comprise only [22% of Canada's STEM workforce](#), even though 67% of women attend post-secondary compared to 62% of men.

The good news is that if we encourage girls in STEM subjects throughout elementary and high school, and expose them to positive role models as well as the rewarding career opportunities that await them, we can change these numbers.

For instance, Gianna Manes grew up in an area where oil and gas was the dominant industry, which meant she was used to the idea of a career in science and engineering and was actively encouraged to take her STEM studies further. Likewise, Danielle Cerisano's

parents—who both worked in the tech sector—encouraged her career in the start-up ecosystem, and she was instilled with a passion for technology and entrepreneurialism while attending high school in Silicon Valley.

Early work experience can be a source of encouragement and inspiration as well. Claudette McGowan had a part-time job in high school that involved basic IT, helping to pave the way for her interest in computer science. Juggy Sihota accepted a job with TELUS while pursuing her undergraduate studies in political science; today, she's a senior executive with an MBA that has helped her take on diverse roles in the company.

Emotional intelligence and continuous learning

With all that being said, STEM work experience or education isn't required for women to have a successful career in innovation. These five leaders are keen to point out that in a world of constant change and transformation, it's people skills—communication, collaboration, problem-solving and relationship building—and emotional quotient (EQ) that power business and drive innovation.

"I don't want to discount how hard I had to work in my career to learn technical skills, but at the end of the day, what has really helped me is my ability to bring people together and hear everyone's point of view," Cerisano explains. "Before we moved to California, I almost

went to a liberal arts high school, and I was going to be in the drama program. And I consider theatre such an important part of my life because it's helped me build that confidence."

Likewise, CJ Ritchie's educational background was in fine arts and psychology before she entered public service as a social worker. "My advice to young women would be, don't think you can't be a part of technology unless you have a STEM background," she says. "There are many roles in and around technology that require a whole different set of skills."

Something all five leaders stress, irrespective of their own training, is that women shouldn't shy away from big aspirations in the innovation economy just because they don't have a STEM degree. Sihota went to school for political science because she wanted to change the world for the better, which she's doing now as an innovation leader. "I think that a lot of women, specifically, might steer away from STEM because they think that they need to have all of that formal education," she says. "And I would suggest, and I think I prove, that's not necessary and you can still be extremely successful."

She emphasizes the need for what she calls an "authentic continuous-learning mindset." In other words, women can get the technical skills they need throughout their careers, as long as they're open to saying yes to new opportunities, advocating for themselves and seeking insight and support when they don't have all the answers.



"People are looking for more creative, softer skills in some cases. Certainly, they're looking for high EQ in all of these roles, because as technology changes and evolves, you can't possibly anticipate what the next need is, but it tends not to be in the hard computer science skills. It tends to be more on the creative side. And particularly as technology blends into the entertainment space and virtually every other industry, those skills become more and more important."

—CJ Ritchie



Big change starts small— improving equity in innovation through eight behavioural nudges

We need to work together to remove systemic barriers, and enable more women to enter and advance through the innovation workforce. For this reason, our eight recommended nudges focus on simple behavioural measures that cumulatively help close the gender gap. On their own, none of these nudges will seem especially groundbreaking—but when enacted together, and applied continuously and consistently, they can move the dial and make a meaningful impact for women.

Nudges change the context in which decisions are made to reduce institutionalized gender biases, which can be so ingrained they're difficult to see. By pointing them out and offering alternative approaches, nudges are low-hanging fruit for organizations as they strive toward the complementary goals of empowering women and driving economic growth.



Nudge 1

Cut gender stereotypes out of the hiring process

As organizations recruit new talent, gender-related stereotypes create obstacles for women right out of the gate. Job descriptions may include gendered language, such as adjectives that are culturally associated with one gender over the other, or discuss the ideal candidate in male pronouns. All of this can lead to a phenomenon known as “stereotype threat,” where a woman’s awareness of negative perceptions can trigger anxiety that affects her confidence and performance. Harmful stereotypes can become a self-fulfilling prophecy.

How can organizations combat this? Here’s an easy fix: eliminate gendered language from job postings, not just in terms of pronouns but traits as well. For example, advertising for a candidate who’s “assertive” or “strong-willed” may inadvertently emphasize stereotypically male traits. In contrast, looking for someone who’s “candid,” “direct” or “self-assured” is more neutral. This is especially important in the innovation economy, because many of the behaviours and values we associate with entrepreneurialism—boldness, taking risk, self-promotion and evangelism—have become conflated with male attributes and role models, even though women have an equal capacity to be visionary leaders.

Research shows that women evaluate more factors than men when considering jobs, such as values and company culture. On a similar note, women are less likely to apply for jobs if they think they lack the skills or training necessary, so employers should think critically about which qualifications they list as must-haves as opposed to nice-to-haves. “What I find over and over again is young women tend to have this belief that they need to have 110% of the qualifications and educational background in order to even apply,” Ritchie says. “And then you’ll see a man, and he’ll say, ‘Well, I’ve got most of this. I’m just going to put my name in and see what happens.’”



“When I was a student, I would see people coming to Queen’s University at entrepreneurship or business conferences speaking to me about their careers. And with every single one of them, I remember a feeling like, ‘I can’t do that. How did they get there? Oh my God.’ And I think I would ask myself—and anyone else feeling that way— why not you? Why can’t you do that? You are capable of so much more than you think you are, and you just have to be patient and give yourself time to get there.”

—Danielle Cerisano



Nudge 2

Broaden your hiring criteria—and fight unconscious biases

In addition to job postings, organizations need to rethink the hiring process and understand certain interviews can reinforce unconscious biases. Taking steps to anonymize candidate applications by removing the name, sex and age of the applicant before review—or not asking for these details in the first place—may prevent interviewers from forming preconceptions of candidates based on their gender.

This “gender blindness” not only paves the way for a more equitable hiring process, but it can give a confidence boost to the candidates themselves. Keeping implicit and explicit gender references out of the workplace has been shown to have a positive effect on women employees, according to [The Institute for Gender and the Economy](#). Avoiding it in correspondence, steering clear of gender-essentializing stereotypes when talking about roles and responsibilities and using “people” instead of men and women are just a few of the ways to start levelling the playing field.

Of course, once in-person interviews start, gender-anonymity is usually not possible. At this stage, organizations should rethink what type of interview they conduct. For example, panel interviews can be problematic, particularly in instances where all the panelists must reach a consensus. Opinions can converge on the most traditional applicant—often a man—and dominant personalities may silence more diverse perspectives in the decision-making process.

Organizations and their leaders can combat this by avoiding panel-style interviews. If there’s a panel, don’t force panelists to come to a single conclusion. Instead, let each one produce their own data points separately.



“Sixty percent of my executive team is female. I did not seek to hire only women into these critical roles—CFO, general counsel. I said I had to get the best people for these jobs. The reason they happen to be women is because I took a non-traditional approach to the skill set that I was looking for. And therefore, the landscape of candidates was broader. And I have acquired amazing talent. Highly qualified women are out there, but if you apply a traditional lens, you are going to get traditional candidates.”

—Gianna Manes



“I think one of the biggest challenges is we are still most comfortable with people who look most like ourselves,” Manes says. “And as a result of that, we perpetuate biases, particularly when we are making selections.” But she points out that it’s not just the final hiring decision that matters, but how candidates are scoped in the first place.

McGowan agrees, having seen similar patterns play out in the financial services industry. “If you went to the same three agencies that you’ve been going to for 15 years, then you’re probably going to find the same people,” she says. “We have to go beyond the same traditional channels and routes.”

Structured or standardized interview questions that are scored objectively can help fight biases in hiring, but they shouldn’t disqualify candidates who may be a strong fit for the organization on a subjective level. “We have to check and challenge,” McGowan says. “What’s the criteria that we’re looking for? Does everybody have to have an MBA? Does everyone have to have a PhD? Or do they just have to be natural problem solvers? Or highly curious? I think that we have to place more value on skills and execution versus designation.”



Nudge 3

Shine a spotlight on women leaders

Never underestimate the importance—or the impact—of positive role models. There’s an expression that says “you can’t be what you can’t see”, and [studies](#) show that increasing the visibility and prominence of women in leadership roles can boost the confidence of employees. There are plenty of innovative women forging new paths in their industries, and celebrating their achievements can motivate others to participate and excel in male-dominated environments.

Before becoming the CIO of British Columbia, Ritchie worked closely with the head of Public Service for the Government of British Columbia, Jessica McDonald, on the Future of Work initiative to rethink the service delivery model from a digital-first and citizen-centric perspective. She knew women leaders excelled in public sector innovation. Yet several years later, as the custodian of the Technology and Innovation file, she found that disparity not only still existed in the Province’s broader technology sector, it was exacerbated.

There are various ways organizations can increase the visibility of women leaders and role models. Perhaps the most impactful is to invite them to speak at conferences, meetings, panels or seminars. This helps raise the profile of the individual leader and creates a ripple effect by empowering young women to see themselves in high-ranking positions.

Of course, speaking engagements only take place occasionally, so what else can organizations do to highlight the contributions of women leaders? It can be as simple as making sure portraits in foyers and hallways display diverse faces or posting a picture of a woman leader on the homepage of the website.



“I really do think we have to support each other—not exclusively, but we do need to be willing to advocate for really talented women. You know people; give their names to other people. Make a path of visibility for really talented women. Because they are out there. They are often less visible than their male counterparts, but they are there.”

—Gianna Manes



There are several women leaders that came after me in that area that never would have gone into that role because they didn't see themselves there. And I feel really happy about the fact that that's the path that I was fortunate enough to have left. But let me also say that I would not have chosen to go there by myself."

—Juggy Sihota





Nudge 4

Promote a culture that values women's voices

Oftentimes, women may be less outspoken than their male colleagues—and this situation is even more noticeable when they're already a minority on teams. That's why it's important to make a point of soliciting their input, particularly in meetings.

As Sihota ascended the ranks to lead consumer health innovations at TELUS, there were many occasions where she was the only woman and the only minority in her meetings. As a result, she has a unique understanding and appreciation of the need to create a space where women know they're seen, heard and respected. To achieve this, she asks other leaders on her team to do three things when women are outnumbered in a meeting:

1. **Be deliberate in asking them for their opinions**—not in an overt way that puts them on the spot, but to make sure they know that their perspectives matter just as much as their male colleagues'.
2. **Disagree with female colleagues a little less.** “Chances are if there is only one woman in the room, she has a diverse point of view—and that diverse point of view is probably not what the rest of the room is thinking,” Sihota says. Leaders shouldn't dismiss their employees for voicing alternative views. After all, those tend to be the ideas that drive innovation.
3. **Vocally agree with the female minority a little more**—not to coddle them but to change the cadence of the meeting to something more conducive to free, open-minded discussion.

As Sihota notes: “In a corporate setting, every day is full of meetings. If you can start to move the dial on that front, I think that you can change the tempo for the future.”



Nudge 5

Include men as stakeholders of positive change

Men are key allies in the push for gender equity across the innovation economy and beyond. They currently hold many of the most powerful positions in business and public office—which means that, more often than not, men have more opportunities to make room at the top for women.

Throughout their career journeys, Manes, Cerisano and Sihota all had male managers who recognized and supported their talent. Cerisano noted that her CEO and mentor at League, Michael Serbinis, played a huge part in creating an inclusive environment—both at a macro level and in his individual interactions with the executive team.

“Michael fostering an inclusive environment has been really critical for me. And it’s more than just saying he supports diversity, inclusion and belonging—he’s actually made a conscious effort to build a different environment here at League, one where people can bring their whole selves to the office and have the flexibility to do what makes the most sense for them personally. Whether people realize it or not this tone at the top informs everything that we do. And that’s just something I’ve never experienced before. Having a mentor like that has been extremely impactful for me.”

As illustrated in Cerisano’s point, men also play a critical role in pushing for the cultural shifts we need in our organizations. Statistically, women have a much higher rate of attrition than men due to male-dominated work environments where a lack of support, marginalization and bullying can **perpetuate the gender gap**. Buy-in from male employees is essential when implementing zero-tolerance policies that take a hard line on these behaviours.

Involving stakeholders of all genders when implementing diversity and inclusion initiatives can help create team-wide cultural shifts and send the right message across the company: that creating more equitable workplaces is something all employees should care about.



“We still have a lot of work to do to continue to grow and to continue to build a diverse company here. And so we need everybody to be a part of it. There are some amazing men out there who want to champion and support diversity just as much as we do. You have to include them in the conversation, and you have to get their support.”

—Juggy Sihota



Nudge 6

Don't stop at mentorship— sponsorship makes a huge difference

Across the innovation economy, senior leaders highlight the importance of mentorship opportunities. All five of the interviewees spoke to the impact senior support has had on their careers, and how it can be mutually beneficial for both the mentor and mentee. “I definitely think that it’s a give-and-take relationship, so go seek out people who you can help, too,” Cerisano advises. “That’s the best way to create those relationships, and to create the right cadence in making sure that it goes both ways.”

Especially in traditionally male-dominated industries, women provide new viewpoints that can be very enlightening for male mentors. “As a mentee, I was conscious to not only be on the receiving end but to be able to offer something back to the mentor.” Manes says, “I always tried to ask what I could do to help them.”

Mentorship is only effective to a point. “It’s great to be a mentor and say, ‘Here’s what you do, here’s the self-talk and here’s how you can approach it,’” Ritchie says. “But it’s better if you pick up the phone, and you call the person who’s reading the résumé and you say, ‘Look, I know this young woman. Her name is coming forward. Here’s what I know about her, and here are the things you might want to consider.’”



“I recently received a call from a male mentor who said, ‘I want you to help me understand AI because I can’t open a newspaper and not see it everywhere.’ Mentorship is about give and take. In this case, he was reaching out to learn about AI. Other times, he reaches out to get a point of view from a different community, gender or generational perspective. It’s so beneficial to have such rich and insightful conversations.”

—Claudette McGowan

This is known as sponsorship, and it's often a more tangible way for leaders to move the dial for women within—and sometimes outside—their organizations. Sponsorship programs can have a direct impact on women's career trajectories; while mentors may provide ad hoc support and advice, sponsors actively advocate for their sponsees and help them achieve their goals in measurable ways.

Having a structured professional development program also signals to women that their professional growth is a top priority for the company—and incentivizes them to ask for help when they need it. Particularly in the innovation economy, where roles and job descriptions may change alongside rapid technological advances, having a senior leader who advocates for more junior colleagues can help make sure women receive the professional development they need to excel—and advance—at their companies.

Organizations should examine their mentorship and sponsorship opportunities: are there formal, company-wide measures to ensure employees get the career development they need? Is it clear who employees should turn to for tangible, meaningful support when they need it? Facilitating these relationships through a formal initiative is a small but strong nudge that can very visibly move the dial.





Nudge 7

Build teams that reflect your customer base

Diversity is essential in the innovation economy. Not only do organizations need to expand their talent search to people reflective of a diverse range of lived experiences, but they need a workforce—as well as leadership and governance—that represents the communities their innovations serve.

This lends itself naturally to an impactful and actionable nudge: organizations can set targets for achieving a workforce and leadership team that reflects their consumers and be transparent as they work toward it.

But as McGowan points out, leaders have to commit to finding skilled talent to fill the positions. “In this field and others, if you’re there and it’s just some form of tokenism, that’s actually the worst thing we can do,” she says. “So we have to make sure that everybody has the right skills, and when they have a seat at the table, it’s an equal seat. Because when you’re in a tough scenario and you need the best and brightest minds on it, there’s zero appetite for people who can’t hold their own.”

Sihota conducts audits to make sure she has a diversity of backgrounds and perspectives that mirrors her broad customer base. Her latest count showed that 40% of the leadership team were women and more than 50% of leaders were from ethnic minority groups, while 60% of the larger team were women. “I think we, as an organization, should look like the customers who we’re trying to serve,” she says. “That signals that we have a greater understanding of our customers, and that will help us become more effective as a result.”



“We’re providing service to a whole range of people from incredibly diverse backgrounds. But the tech industry hasn’t quite caught up with what companies should look like, because they don’t always look like their customers. And I think that’s going to be a critical business problem that needs to be solved in the near future.”

—Danielle Cerisano



Nudge 8

Advocate for each other—but also for yourself

It's one thing for organizations to move the dial nudge by nudge, but women also need to take matters into their own hands. That's why this final nudge is focused on women speaking up both for themselves and for the women following in their footsteps.

[PwC Canada's Women In Work 2018](#) report shows that women who negotiate for career enhancement opportunities are getting what they ask for at an increasingly higher rate. They need to know it's okay for them to be their own biggest champions—it's not self-centred or presumptuous.

"I think that people feel, at least in a corporate setting, that if they tell their boss that they want to do something different, they might be perceived as disloyal and it might hamper them from a career trajectory," Sihota says. "I'm trying to crash that barrier within my own organization. If I can help people get to where they want to go because it drives a passion or purpose for them, they will be more successful, and the company will benefit overall."

Be communicative: open up discussions with your employer around your objectives and the career you're looking for. And bear in mind that there are plenty of senior colleagues with whom you can build a professional network. There will always be people who want to be in your corner and help you succeed, so seek them out.

"It's important to put your hand up and go after the things you want. In general, people have been very supportive," McGowan says. "I openly share that not every experience is coloured with challenge and tribulation. Sometimes it's not a smooth ride—but it's not as rough a ride as many would anticipate."

When an opportunity comes your way, seize it—even if it seems out of your league. Every learning experience makes you stronger, and you can always ask for help. "Don't limit yourself by saying that you're not ready, or you don't have the background, or you don't have the ability," Sihota says. "I think, if you've got the right mindset, you should take on any challenge that is presented to you—and you should create your own opportunities with that mindset as well."



"I have this saying: 'Lift while you climb.' That means when I'm in a position of influence and authority, I will make decisions to try to level and equal the playing field. What does that mean specifically? I will hire women. I will look for women. I will look for diversity. Sometimes it's not easy because you'll get a lot of applications that are homogenous. But you have to find the ones that are different, and actually put your money where your mouth is and hire those people."

—Juggy Sihota



The time to start is now

Today's industries and economies are based on innovation. If Canada's businesses and governments are going to succeed and take the lead on the world stage, we need to achieve our full potential, and that means we need 100% of the talent pool. We need to move the dial further and faster—even if it starts with a simple nudge.

We welcome you to read [#movethedial's 2017 benchmark report “Where's The Dial Now?”](#) to get a better sense of the gender gaps that have made initiatives like this one necessary. And to see where progress is taking hold or lagging, have a look through the [Canadian findings](#) from PwC's Women in Work Index 2018.

#MOVE THE DIAL

#movethedial is a global movement committed to advancing the participation and leadership of all women in technology. Founded on the premise that advancing the full talent pool will make Canada's tech industry the strongest and most inclusive in the world, #movethedial believes the opportunity for equity for all women-identified people exists at a global level. Proudly headquartered in Toronto, Canada, #movethedial is working to drive support and commitment to the #movethedial movement at home and internationally.

Learn more at www.movethedial.com



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