STRATEGIES FOR CAREER ADVANCEMENT:

A SUMMARY NEEDS ASSESSMENT REPORT

Prepared by:
Catherine Elliott, Ph.D.
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PURPOSE

The purpose of this document is to summarize the main findings of a Needs Assessment which was commissioned by Women in Communications and Technology (WCT) in March of 2016. The Needs Assessment sought to:

❖ Document the current status of women’s participation in the Information and Communications Technologies (ICT) sector in Canada, with a focus on the last five years (2010-2015);
❖ Identify strategies for improving women’s career advancement in the ICT sector; and
❖ Gather more in depth information about mentoring/sponsorship as a career strategy in the ICT sector.

Data was gathered using two main methods:

Literature Review (Part 1): Given the nature of this sector, a fairly broad net was cast for the literature review. Various sources were reviewed - academic literature, reports, blogs, and newsletters - with a focus on the last five years (2010-2015). Current industry statistics were also analyzed to gain a greater understanding of the sector (size, growth, etc.) and women’s participation in ICT. These findings are summarized in Part 1.

Survey (Part 2): To learn more about the needs of women in the technology and communications sector, an online survey was distributed to over 8,000 members and affiliates of Women in Communications & Technology (WCT) in February 2016. More specifically, the survey sought to learn more about barriers to career advancement, organizational climate, and successful strategies that professionals have employed. Participants were also queried about mentorship as a potential leadership development strategy. These findings are summarized in Part 2.

2 This Needs Assessment is an update to the last report commissioned by WCT: Game Changers II- TMT-GBA, 2012 and other similar reports regarding the status of women in ICT For example, also see Cukier, W. (2009), CATAWIT: Attracting, Retaining and Promoting Women. Best Practices in the Canadian Tech Sector.
3 This is a difficult sector to “capture”, as it includes a number of areas - communications, media, broadcasting, cable and information technologies – which are converging in a new world of digital and social media.
Part 1: CURRENT STATUS OF THE ICT (TECH) SECTOR:

The Information and Communications Technologies (ICT) industry has been described as a male-dominated environment for some time. Our research shows that, over the last five years, there has been little progress. Although more women are entering the sector at the entry levels, they do not have the same advancement opportunities as their male counterparts. The higher the level on the organizational chart, the more women are underrepresented (Jacquemard, 2015). The following sections summarize the ‘10 Key Findings’ from our research.

10 KEY FINDINGS: From the Literature Review

1. The Information and Communication Technologies (ICT) sector is growing, but women’s participation in the sector is not.

The Information and Communication Technologies (ICT) sector is a diverse and vibrant sector of the economy, having contributed $70.2 billion to the Canadian economy in 2014 (4.3% of national GDP).4 The sector has experienced significant growth over the last 15 years, accounting for 9.4 per cent of all real GDP growth in Canada since 2002 (Wensley, 2013; ISEC, 2017). However, the Information Technology Association of Canada (ITAC) reports that women’s participation in the sector has not kept pace, with the engagement of women hovering “at around 25%”; and it “has been at this level for a least a decade” (Wensley, 2013, p. 1).

2. Across the sector, women are under-represented in leadership positions. However, there is room for optimism - a small group of tech firms are blazing the way.

The under-representation of women on Boards of Directors in ICT is consistent with, and reflective of, a larger problem across all Canadian companies. For example, a 2014 Annual Corporate Directors Survey from PricewaterhouseCoopers reported that only 14% of the directors that serve on the boards of Canadian companies with more than $1 billion in annual revenue are female—closely aligned with the gender distribution averages of Fortune 500 public company directors (PWC, 2015). Catalyst continues to track the status of women across the globe and has found that the leadership gender gap persists across multiple levels, sectors, and countries. In January 2017, Catalyst Canada started the year by reporting that women currently hold a mere 22 (4.4%) of CEO positions at S&P 500 companies; and they note (via twitter) that “there's still work to be done” (Catalyst, 2017).

These statistics are fairly similar to studies measuring the leadership gap in the ICT sector in Canada. The Information Technology Association of Canada’s (ITAC) recent study on

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the Gender Diversity of Board of Directors of Canadian ICT Companies found that the percentage of women on the Boards of Directors of the ten largest Canadian ICT companies is 16.5% (Wensley, 2013). These ICT companies include Blackberry (RIM), BCE, Rogers, Telus, Celestica, CGI, and Shaw Communications, among others.

There are positive signs on the horizon. Some tech giants have made more of an effort to promote gender balance within their companies. For example, Fortune recently ranked Pandora as the top tech company, promoting gender diversity with 49% of its workforce being female. Open Text’s Board of Directors is made up of three women and six men – the best ratio of any of Canada’s large ICT companies, and one of the best of any public company in Canada (Wensley, 2013). Whether this will translate into greater numbers of women in senior leadership roles remains to be seen. (Refer to Table 1.)

<table>
<thead>
<tr>
<th>Company</th>
<th>Total Employees</th>
<th>Percentage Male Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>98,000</td>
<td>70%</td>
</tr>
<tr>
<td>Facebook</td>
<td>7,200</td>
<td>69%</td>
</tr>
<tr>
<td>Google</td>
<td>48,600</td>
<td>70%</td>
</tr>
<tr>
<td>Twitter</td>
<td>3,300</td>
<td>70%</td>
</tr>
<tr>
<td>Yahoo</td>
<td>12,200</td>
<td>62%</td>
</tr>
</tbody>
</table>

Source: Manjoo, (2014) – Company reports, S.E.C. filings

In Canada, an Ottawa-based firm, Pythian, is taking bold strides to improve the recognition of female leaders and their influence within organizations. Pythian believes that “while measuring the percentage of leaders in a company who are women is important, it doesn’t fully capture the extent to which women leaders influence the business” (The Pythian Group Inc., 2016). It has created a unique tool, the Pythia Index Formula, which it makes available to other organizations. In the meantime, Pythian remains transparent about their own index and the steps that they are taking to continually improve it.

3. There is a growing business case for diverse leadership.

A recent report by McKinsey and Co. examined proprietary data sets in the United States. They found that companies in the top quartile for gender or racial and ethnic diversity are more likely to have financial returns above their national industry medians (Hunt, Layton, & Prince, 2015). Increasingly, there is evidence to support the business rationale for more women in leadership positions: when companies commit themselves to diverse leadership, they are more successful (Catalyst, 2017).

“More diverse companies, we believe, are better able to win top talent and improve their customer orientation, employee satisfaction, and decision making, and all that leads to a virtuous cycle of increasing returns.” McKinsey & Company (Hunt, Layton, & Prince, 2015).
4. The entry-level tech pipeline is not robust and women are not being attracted to ICT as a career.

According to the Diversity Institute, there are two prime explanations for the shortage of women in the ‘tech pipeline’ over the last 10-15 years: 1) the ‘dot.com bust’, which destroyed opportunities in the sector; and 2) the notion that the job is ‘boring’ (and focused on antisocial ‘geeks’ doing coding) (Diversity Institute, 2007). While female representation in American elite institutions is reported to be about 50% in introductory computer science programs, women with STEM degrees hold less than 25% of STEM jobs and are less likely to work in STEM occupations (Benjamin, 2014). The statistics are similar in Canada. Women are the majority of students in most masters’ programs; however, representation is significantly lower in STEM fields, including mathematics/computer science at 36% and architecture and engineering at 30%. Furthermore, women educated in STEM are more likely to go on to careers in other disciplines. They represent the majority in the humanities, arts and services sectors (Status of Women Canada, 2015).

5. Women leave ICT because of workplace culture & gender stereotypes.

Even if they make it through the ‘tech pipeline’, many women do not stay. Why? Women leave ICT because they are unhappy with the “chilly climate” and workplace culture, not because they have lost interest in the work or because “math is hard” (Cukier, 2009; Snyder, 2014). This does not appear to have changed within the last five years. Mathilde Collin, co-founder and CEO of Frontapp, for instance, notes that she constantly encounters negative gender biases. She describes how women need to consistently work harder while at the same time they often encounter inappropriate sexual attention as well:

You do have to work a bit more to get credibility and have people listen to you; it might be harder to recruit developers and make them trust you; and you will end up going to a few sales meetings where the other person is more interested in you than in your product” (Collin, 2014, p. 1).

6. Women are experiencing both a “glass ceiling” and a “sticky floor”.

Women suffer from both barriers to career advancement: the “glass ceiling” and “the sticky floor” (IT Canada online, 2015). On one hand, women may not be given the opportunity to move up or may not even perceived as a contender for higher position. On the other hand, once women find their comfort zone, they often decide that the risks of a move far outweigh the benefits.
7. Work-life balance continues to be a challenge for women in tech.

Women still tend to carry the lion’s share of household roles related to parenting and home-making. At the same time, they typically value work-life balance more than men (Cukier, 2009). This remains unchanged in the last five years and continues to limit women’s advancement and discourages them from aspiring to senior leadership positions.

In an interesting study commissioned by American Express Canada and Women of Influence (Peco, 2016), on “What is Holding Women Back” in Canada illuminates a number of observations about work-life balance and how it impacts women disproportionately:

❖ **Almost one in five** women believe that their career has taken a back seat to their partner’s career.
❖ **44%** felt that they take on more household responsibilities than their partner while **73%** reported being the primary breadwinners or contributing equally to the household income.
❖ **47%** agreed that they have made sacrifices in their own careers for the family versus **2%** that agree their partner has made sacrifices.
❖ **84%** of women feel it is possible to achieve a work-life balance and still be successful.

8. The ‘old-boys network’ is alive and well.

The ‘old-boys network’ still presents a problem for women’s networking and sponsorship, two career strategies instrumental for success. Since men are more likely to hold senior leadership positions, women have significantly less access to senior-level people who can help them advance; and fewer women report receiving this type of assistance (Daskal, 2015). The Information Technology Association of Canada (ITAC)’s study on the *Gender Diversity of Boards of Directors of Canadian ICT Companies* identified that the low participation rate of women on Canadian ICT boards (16.5%) was due to qualified women not generally being part of their network, or knowing where to reach or find these networks (Wensley, 2013).
9. There are few female tech role models.

With men continuing to dominate the tech industry, there are very few female executive role models for aspiring ICT professionals. When women don’t see other women at the top, they tend to experience an “identity gap”: they don’t identify themselves as a leader and don’t believe that they ‘have what it takes’. They have a harder time finding someone whom they can ‘model’ – to develop their leadership skills.

American Express Canada and Women of Influence released a survey that measured this problem. Only 8% of women felt that they had a sponsor or someone more senior who would champion their work. Among those with sponsorship, 89% said that their sponsor made them feel like a high-potential employee and 62% said it made them feel like they could reach the C-suite one day (Schick, 2016). If women can’t see others at the top who ‘look like them’, who will sponsor them and advocate for them, then they are less likely to identify themselves as a senior leader, feel like one, and believe in themselves.

10. The Gender Gap persists across all sectors. Reinventing the workplace for gender parity will require ongoing, senior level commitment.

The persistence of the gender gap in ICT is mirrored across all sectors. Recent reports by McKinsey in their ‘Women Matter’ series shows that women represent 39% of entry level hires but occupy 11% of the senior-leadership roles in the firm. The authors call for changing corporate attitudes about women in the workplace; and it is widely acknowledged that without commitment from the top, nearly any major change program will fail (Barton, Devillard, & Hazlewood, 2015). Crucial aspects to addressing change include sponsorship, minimizing the effects of maternity leave and parenting responsibilities on career advancement and wage increases, as well as shifting criteria for promotions to include a diversity of leadership styles (Barton, Devillard, & Hazlewood, 2015). In ICT, these issues are more pronounced due to the smaller proportion of women in senior, influential leadership roles. It means significant cultural change. As noted by Stackpole (2015):

“It’s been well established that women in technology roles have a harder time. It’s not just a technical issue –it’s impacting women in this industry across the board. The onus needs to be on fixing the organizations, not fixing the women” (Stackpole, 2015).
Part 2: BARRIERS AND STRATEGIES FOR SUCCESS

Over two hundred WCT members and affiliates responded to a national on-line survey in February 2016. The purpose of the survey was to learn more about participants’ experiences in the ICT sector. Participants answered questions about the strategies for career advancement, barriers, and personal experiences with mentorship or sponsorship. This section summarizes our findings.

6 KEY FINDINGS: From the Survey

1. Women’s talent in the ICT sector is under-recognized and under-utilized.

Our survey findings show that women are not being identified, developed, and groomed for advancement opportunities. They lack the appropriate career sponsorship and mentorship to successfully navigate the ‘old boys’ network and stereotypical male culture. Participants of the Needs Assessment Survey were asked to choose the top five barriers that they believed were inhibiting their career advancement. The results indicate that “lack of developmental and/or advancement opportunities” was selected most often. Additionally, almost 50% of respondents chose the following as top barriers: “Not having an executive sponsor”, “inability to navigate organizational politics”, “the old boys’ network” and ‘not having a mentor’. Figure 1 indicates the percentage of respondents who selected each barrier among their ‘top five’.

FIGURE 1: Barriers to Career Advancement
2. Women continue to face “invisible” barriers, including stereotypical “macho” attitudes about women in tech.

Consistent with our findings in the literature review, the respondents identified many “invisible” or insidious barriers to advancement in the ICT sector. In the survey, they were given the opportunity to add additional comments, to express their views. In their own words, they described the difficulty of being a minority in a male-dominated workplace. Here are a few of their thoughts on the barriers to success:

- “People feeling threatened by a strong woman, both men and women”;
- “Lack of inclusiveness and transparency”;
- “Being female in IT is a barrier to advancement; and
- “Inability to ‘blow my own horn’”.

3. The majority of participants were ‘cautiously optimistic’ that there is a positive shift towards supporting and advancing females into leadership positions in ICT.

When asked about the organizational climate and support for women’s advancement, the respondents indicated that their organizations are moving in the right direction, but still have a long way to go. The majority reported that there are still insufficient role models and they have fewer advancement opportunities than their colleagues. Statements to which the respondents “agreed” or “strongly agreed” more than others included:

- “My organization’s values reflect my own values” (65%);
- “I am satisfied with my progress towards achieving my career goals” (55%);
- “I have a strong desire to stay with my organization” (55%); and
- “My organization fosters a climate that is supportive of all individuals” (46%).

Are the organizations’ attitudes shifting ‘towards promoting women into leadership roles’? Thirty-eight percent (38.5%) of respondents think so (agree or strongly agree) and 33.5% are uncertain that there has been a shift. Coupled with the other responses above, we conclude that there is ‘cautious optimism’ among the majority of respondents that the climate is warming and moving in the right direction to support females’ advancement into leadership roles.
4. Women use multiple strategies to advance in their careers.

Overwhelmingly women reported ‘exceeding performance expectations’ as their top strategy for career advancement (83.5%). In addition to this, 62.2% indicated ‘gaining more experience in my current position’ and 59.1% indicated ‘networking with influential colleagues’ as the top strategies. When describing the one experience that had the most profound impact on their professional growth and/or career advancement, respondents indicated the five main themes: meeting and exceeding performance expectations, having a mentor/sponsor, networking, changing organizations or jobs, and undergoing training/education to obtain new skills. Refer to Table 2 for more detail.

<table>
<thead>
<tr>
<th>TABLE 2: Most Impactful Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meeting and Exceeding Performance Expectations</strong></td>
</tr>
<tr>
<td>&quot;Exceeding expectations for performance - what you commit to gets done&quot;</td>
</tr>
<tr>
<td>&quot;Working longer and harder to be twice as good but get half the credit&quot;</td>
</tr>
<tr>
<td><strong>Having a Mentor/Sponsor</strong></td>
</tr>
<tr>
<td>&quot;Having an executive champion to help guide and advocate on my behalf to form a strong professional reputation for excellence&quot;</td>
</tr>
<tr>
<td>&quot;Having an experienced male mentor who helped me think in different modes&quot;</td>
</tr>
<tr>
<td>&quot;Having an executive champion who actively sought out opportunities for me that allowed me to get exposure to areas outside of my daily responsibilities and that were new challenges for me&quot;</td>
</tr>
<tr>
<td><strong>Networking</strong></td>
</tr>
<tr>
<td>&quot;Speaking up in networking opportunities to ensure key leaders know me and understand my value -- building and maintaining a network so that I can use those connections to help influence my next move&quot;</td>
</tr>
<tr>
<td>&quot;Having a good network and being known and supported because of my competencies&quot;</td>
</tr>
<tr>
<td>&quot;Informal networking - being introduced to new opportunities through my personal network&quot;</td>
</tr>
<tr>
<td><strong>Strategically Changing Organizations or Jobs</strong></td>
</tr>
<tr>
<td>&quot;Transitioning companies for career growth&quot;</td>
</tr>
<tr>
<td>&quot;Working in a slightly bigger than Start-up Company and working for an executive who had confidence giving me new work and letting me learn from my mistakes&quot;</td>
</tr>
<tr>
<td>&quot;Early in my career, I made the decision to switch from administrative roles to technical ones&quot;</td>
</tr>
<tr>
<td><strong>Undergoing Training/Education to Obtain New Skills</strong></td>
</tr>
<tr>
<td>&quot;Continuous improvement on professional skills - Toastmasters, PMP Certification, Technical Training, etc.&quot;</td>
</tr>
<tr>
<td>&quot;Taking an external course at a recognized institution in an area that I was interested in&quot;</td>
</tr>
</tbody>
</table>
MENTORING IS A POWERFUL STRATEGY FOR WOMEN TO DEVELOP THEIR CAREERS IN ICT. THERE IS POTENTIAL TO FURTHER LEVERAGE THIS APPROACH.

Women have been profoundly affected by their mentoring experiences. Of the sixty-three percent (63%) who reported having had a mentor, 93% indicated it had impacted the advancement of their careers in some way. What were the top functions that the most memorable mentors fulfilled? According to respondents, these included “advice”, “sounding board”, “role modelling”, and “coaching”. They also indicated the ingredients for a successful mentoring relationship. These include: 1) developing a high level of trust; 2) having a mentor who is supportive and approachable; and 3) having a mentor who is experienced and can serve as a source of inspiration and sound career advice (e.g. understands the political landscape). Refer to Table 3 below.

**TABLE 3: Ingredients for a Successful Mentoring Relationship**

| Trust | “Trust and faith in a core set of skills and providing large stretch assignments”  
<table>
<thead>
<tr>
<th></th>
<th>“Gaining trust with my mentor and building a relationship”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having an approachable and/or supportive mentor</td>
<td>“The mentor that I had was very encouraging and recognized my efforts and offered insights on how to improve.”</td>
</tr>
<tr>
<td>Experience of the mentor</td>
<td>“They were older and further along in their careers. Could show me what to watch out for in advance. Showed me how to navigate the political landscape of work.”</td>
</tr>
</tbody>
</table>

NOTE: In this survey, the term “mentor” was used because of its broad applicability and understanding (i.e. it encompasses the many different functions that mentors may fulfill). However, it is important to highlight that many respondents emphasized the “sponsorship” elements – “having an executive champion” to “advocate on my behalf”, expand my network and professional reputation, seek opportunities for exposure, new challenges and responsibilities. For this reason, ‘sponsorship’ has recently been adopted as the preferred terminology for many organizations (to focus on mentoring that is directed towards career advancement, particularly involving very senior level/high potential personnel).
6. There is strong interest in formal mentoring programs, particularly one which focuses on cross-company mentorship.

If presented with the opportunity, would women in communications consider participating in a “cross-company” mentorship program? According to the Needs Assessment Survey, 75% of respondents indicated that they would or already have considered cross-company mentorship. Furthermore, the respondents were asked what characteristics would make such a program successful. They indicated four critical factors: mutual trust and respect between mentor and mentee; commitment of both participants; clear guidelines for the program and for the relationship; and a good match between mentor and mentee (Figure 3).

FIGURE 2: Characteristics of a Formal Mentorship Program
CONCLUSION

In conclusion, this *Summary Report* has attempted to highlight some of the main findings of a Needs Assessment which was commissioned by Women in Communications and Technology (WCT) in March of 2016\(^6\). The findings were summarized in two sections:

- Part 1: Current Status of the ICT (Tech) Sector (from the Literature Review); and
- Part 2: Barriers and Strategies for Success (from the Survey)

**In Part 1**, the key findings indicated that:
- **Little has changed in the last 5 years.** While the ICT sector has grown in absolute numbers, progress has not been made in ‘breaking the glass ceiling’, detaching from the ‘sticky floor’, or increasing the pipeline.
- **However, there are glimmers of hope.** The business case for gender diversity is gaining momentum. With more diversity, comes much-needed cultural change, to warm up the ‘chilly climate’ and remove the ‘toxic culture’.

**In Part 2**, there were several key observations:
- **Women in ICT continue to face barriers in progressing to the senior leadership levels in tech companies.** They are not given opportunities, they lack executive sponsorship and have difficulty navigating organizational politics and the ‘old boys’ network’.
- **The ‘chilly climate may be thawing’:** While there were mixed responses in terms of a supportive organizational climate, in general, the majority of participants were ‘cautiously optimistic’ that there is a positive shift towards supporting and advancing females into leadership positions in ICT.
- **The most frequently mentioned strategy for career success is working hard (“exceeding performance expectations”).**
- **Mentoring was strongly endorsed** by participants as one of the experiences “that has most profoundly affected” their professional growth and/or career advancement. **Sponsorship\(^7\)** was specifically highlighted as critical. Respondents described more senior individuals who have served as ‘executive champions’, providing them with active sponsorship by offering strategic career advice, networking, advocacy, exposure to challenging assignments, and reputational capital.
- **There was strong interest in a cross-company mentorship program.** A focus on sponsorship would be critical to maximize advancement opportunities.

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\(^7\) Whereas ‘mentoring’ is the term most commonly used and understood (and broadly refers to ALL of the functions that a mentor might provide – both psychosocial and career), ‘sponsorship’ has recently been adopted by many organizations as the preferred term because of its focus on functions which are focused on career advancement, particularly to the ‘C-suite’. See Hewlett (2013), *(Forget a Mentor) FIND A SPONSOR.* Or, for a summary discussion, see *Women Powering Business*, (2014).
ACKNOWLEDGEMENTS

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References


