CAREER EXPERIENCES OF CANADIAN INFORMATION AND COMMUNICATIONS TECHNOLOGY EXECUTIVES:

UNDERSTANDING CAREER ADVANCEMENT BARRIERS AND ENABLERS FOR WOMEN AND MEN.
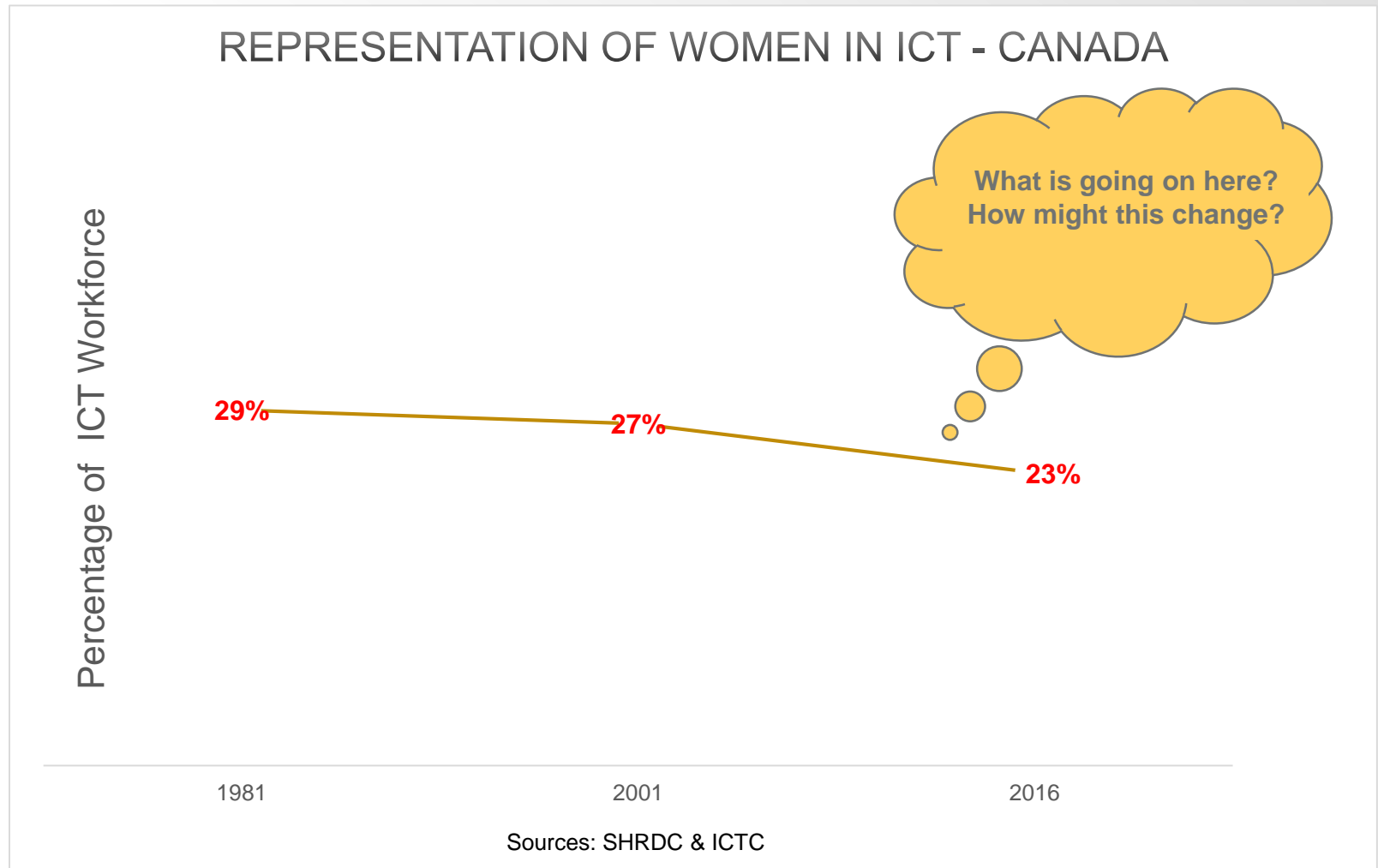
June 15, 2017, Jules J. Fauteux

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Presentation Agenda

- The Problem

- Topic and Research Questions

- Selected Literature

- Study Methodology

- Results and Discussion

- Contributions, Limitations, and Futures

- Acknowledgements

"Tech's ugly gender problem" Lapowsky, 2014

REPRESENTATION OF WOMEN IN ICT - CANADA

Percentage of ICT Workforce

29%

27%

23%

What is going on here?
How might this change?

1981

2001

2016

Sources: SHRDC & ICTC

Topic & Research Questions

Topic: How might patterns in the career experiences of ICT executive men and women across Canada inform initiatives to increase the representation of women in the Canadian ICT sector?

Research questions:

1. How do ICT executive men and women across Canada describe their careers?

2. How do ICT executive men and women across Canada describe barriers and enablers to their career advancement?

3. What are the ICT executive career experience patterns across gender and across regions of Canada (barriers and enablers)?

4. What initiatives might increase the representation of women in the Canadian ICT sector?

Literature - Careers

- The evolution of a career involves a range of roles and stages in a life cycle (Levinson, Super)

- Careers tie individuals and organizations together (Schein)

- Careers are *"a series of more or less unpredictable experiences lived by individuals continually renegotiating work and non-work aspects of their lives"* (Dries)

- The nature of careers are changing, they are now *"Boundaryless"* (Sullivan)
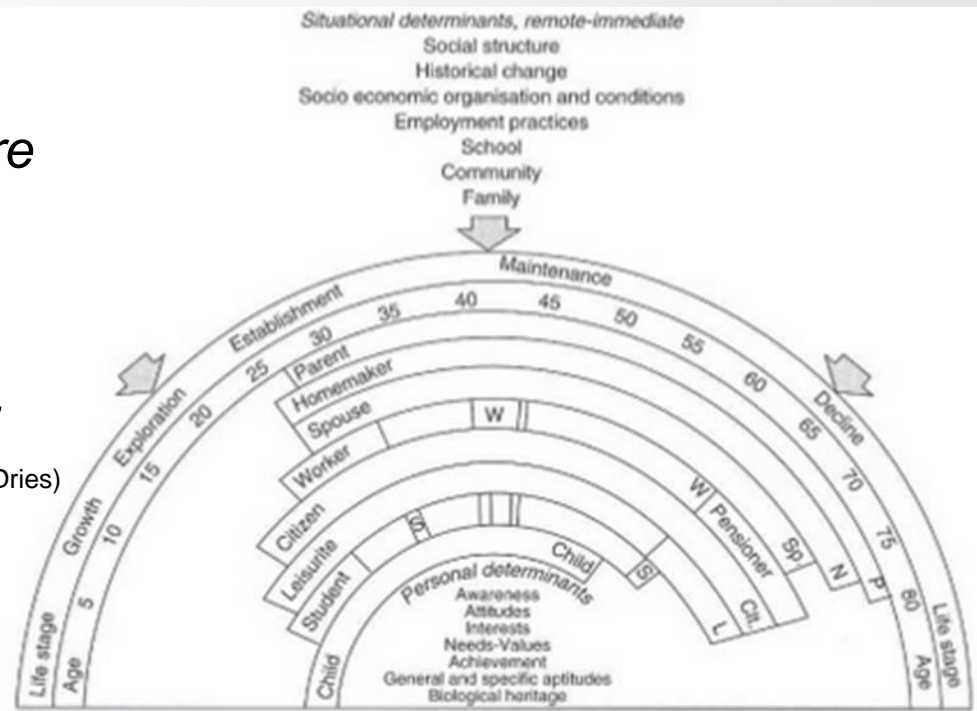
The Life-Career Rainbow Model from Super (1980).

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Literature - Gender and ICT

Typical Problems

- Chilly Climate

- Good Old Boy's Network

- Homosocial Reproduction

- The Double Bind

- Queen Bees

- The Right Stuff

- Locks and Keys to the Boardroom

Typical Solutions

- A strategic HR Imperative

- Integrated Approach

- Strong Leadership

- Mentors and Sponsors

- Flexible Arrangements

- Bias Awareness

- Targets and Measurement

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Methodology

- Purposeful snowball sampling
- Semi-structured interviews
- Telephone for consistency
- Recorded and transcribed
- Nvivo QDA SW Package
- Member checked NSW
- Continuous validation
- Thematic analysis
- Five coding cycles
- Coding reviewed
- SW Data Queries

Pragmatic Approach
Multi - Case Study
Two Phases

Case study explores what can be learned here that the reader needs to know."

Stake, 2006

Cases & Demographic Data

Canada			Nova Scotia			Ontario			British Columbia		
Total n=48	Men n=24	Women n=24	Total n=16	Men n=8	Women n=8	Total n=16	Men n=8	Women n=8	Total n=16	Men n=8	Women n=8
Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9	Case 10	Case 11	Case 12

	Canada					
	Total		Men		Women	
Demographic Information						
Age (Median)	52		53		49	
Family Background						
Single	2	4%	0		2	8%
Married	39	81%	23	96%	16	67%
Born Outside Case Region Area	10	21%	3	13%	7	29%
Education						
Technical Degrees (per person)	47	1.0	25	1.0	22	0.9
Non-Technical Degrees (per person)	29	0.6	13	0.5	16	0.7
Job Title						
President/ CEO	10	21%	6	25%	4	17%
CIO/ Vice President	23	48%	13	54%	10	42%
Director/ Senior Manager	15	31%	5	21%	10	42%
Career History						
Organizations Worked (Mean)	4.9		4.7		5.1	
Positions Held (Mean)	8.9		8.8		9.0	
Assignments Lived Other Canada (per person)	42	0.88	25	1.04	17	0.71
Assignments Lived USA (per person)	9	0.19	5	0.21	4	0.17
Assignments Lived Rest of World (per person)	9	0.19	3	0.13	6	0.25

Semi-Structured Interviews

Excerpts from the interview guide:

• Describe your career?

• What *barriers* to career advancement have you experienced?

• What *enablers* to career advancement have you experienced?

• What are you most proud of?

• What are your regrets if any

Analysis & Presentation Frameworks

Data Sources	Data Category	Levels of Analysis	Career Influences	Career Stage
Interview Transcripts Resumes Profiles Socio Economic Literature ICT Sector Literature	Feelings Traits Skills Values Education Experiences Relationships Resources Structures Policies Programs Communities Cultures Results	Individual Family Organization Society	Barriers and Enablers to Career Advancement	Early-career Mid-career Mature-career

Five Rounds of Coding

Barrier		Category	Enabler	
Men	Women	Career Advancement Influence	Men	Women
		Individual		
		Family		
		Organization		
		Society		

n ≥ 2 within gender, and n ≥ 2 regions

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Results: Early & Mature Career

Early Career Influences

- Education

- Education system

- Coop, especially starting in ICT

- Positive upbringing and technology exposure

- Entry level serendipity

Mature Career Outcomes

- Developing others

- Start ups & turnarounds

- Job scope, scale & status

- No regrets

- (Lack of) balance

- Missed opportunities

- Career serendipity

- Appreciative of reflection

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Results: Mid-Career Model

Barrier		Category	Enabler	
Men	Women	Mid-Career Advancement Influence	Men	Women
		Individual		
	-	Self Confidence & Assertiveness		
		Innovation & Risk Taking	+	++
		Initiative	+	++
		Determination	+	++
		Hard Work Ethic	+	+
		Track Record	++	+
		Luck	+	++
		Relationships	++	+
		Mentors & Sponsors	+	+
		Business Skills	+	++
	-	Technical Skills	++	+
		Family		
	-	Care Responsibilities		
-	-	Business Travel		
		Support & Encouragement	+	++
		Organization		
	-	Business Cycles & Downsizing		
	-	Being in a Minority		
	-	Politics & Social Network Exclusion		
-	-	Feeling of Person-Organization Fit	++	+
=	=	Policy / Programs	=/+	=/+
	-	Inequitable Compensation		
-	-	Recognition & Commitment Bias		
	-	Hiring & Promotion Bias		
		Growth & Restructuring	+	+
		Stretch Assignments & Visibility	+	++
		Society		
	-	Leadership Stereotypes		

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Discussion of Results

Q1) "How do ICT executive men and women across Canada describe their careers?"

- Application of a career-life perspective
- Shift towards the boundaryless career
- Later career stage as a "calling" to help others
- **Consider** programs which harness intentions to mentor

Q2) "How do ICT executive men and women across Canada describe barriers and enablers to their career advancement?"

- More enablers than barriers
- Enablers are individual, barriers are organizational
- Women experience more barriers, consistent with literature
- Reflection was therapeutic, career planning evidence was low
- **Consider** encouraging career planning and management tools

Discussion of Results

Q3) "What are the ICT executive career experience patterns across gender and regions of Canada?"

- Patterns at national level, not by region
- Canadian ICT executive men & women are homogenous groups
- **Consider** national ICT sector initiatives versus regional ones

Q4) "What initiatives might increase the representation of women in the Canadian ICT sector, particularly at senior levels?"

- Individuals might avoid the barriers and embrace the enablers
- Organizations might continue to embrace holistic programs
- **Consider** a fresh approach of embracing measurement & targets

Contributions, Limitations & Futures

Contributions

- Uniquely Canadian perspective

- Captured career stories

- Model of barriers and enablers

- Insights for individuals and organizations

Limitations

- Sample size and generalizability

- Participant predisposition

- Potential researcher bias

- Potential confusion/ bias from DNS data re-use

Futures

- Share study with ICT sector councils

- Publish in academic and practitioner communities

- Ongoing research about organizational resistance to workforce measurement and targets

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