

# Accessibility in Perspective



*Roll a Mile*

# Accessibility In Perspective

Anyone working to advance accessibility knows of the variety of objections encountered, particularly with regard to misperceptions about cost of implementation, lack of awareness, resistance of government regulatory pressures, and attitudinal barriers.

As with all movements of social change, initial resistance must be overcome as there has always been pushback from those believing they benefit from maintaining the status quo.

That's okay, we accessibility advocates are in good company...

# Movements of Social Change



# Movements of Social Change

## Industrial Revolution

- Resulting labour laws

## Women entering workforce

- Social, political, economic influences of World Wars
- Objections: Attitudinal (deterioration of family/society); Cost (install women's change rooms); Economics (take jobs from men)
- In fact, when I get discouraged, a friend always says, "nice disabled don't want access" in reference to the objections faced by the suffragist movement, and I am spurred on.

## Civil / Human Rights

- "No wheelchairs allowed" - doesn't need a sign, just absence of ramp

## LGBTQ+ equality

- BC / Ont. law society accreditation denial for discrimination
- BC school trustees expelled from caucus



# Movements of Social Change

## Environmentalism

### Consumer Demand

- 80% willing to pay more for green products (Grocery Product Manu's of Canada)
- Adoption rate / critical mass: Recycling / Earth Day / Earth Hour
- Motivating factor to remain competitive

### Government regulations

- Kyoto Protocol, NAFTA side accord, pollution control, etc.

### Corporate Adoption

- Expenditures in all areas: Production, Packaging, Delivery, Distribution, Billing
- Evolved: Pollution Prevention > Product Stewardship > Sustainability



# Recent Expenditures



# Recent Expenditures

Society has always had to adapt to social, political, economic and technological influences.

This has always cost money.

# Business

## technological advances ie) computers

- training / building retrofit / purchase-install-maintain
- websites, online portals, electronic & social marketing

## improved access to services

## government regulations

- packaging:
  - Bilingual requirement (1974) to sell packaged products in Canada
  - Ongoing CFIA changes to nutritional label requirements





# 50 Years of Business Innovation

Adding Machines  
Automatic Check Endorsers  
Bookkeeping Machines  
Check Protectors  
Combination Registers  
Copying Machines  
Duplicating Machines  
Folding Machines  
Paging and Calling Systems  
Photo Copying Devices  
Slide Rules  
Tabulating Machines  
Tabulating Machines  
Word Processing Machines

Addressing Machines  
Automatic Typewriters  
Calculating Machines  
Coin Changing Machines  
Computers  
Counting Machines  
Facsimile Machines  
Inter-communicating Machines  
Perforating Machines  
Scales  
Stencil Cutting Machines  
Teletype Machines  
Typewriters

Autographic Registers  
Billing Machines  
Cash Registers  
Coin Counters and Sorters  
Copy Holders  
Dictating Machines  
Finding and Filing Devices  
Numbering Machines  
Postage Machines  
Signature Writing Devices  
Stenographic Machines  
Time Recording Machines  
Visible Index Systems



# Banking Industry

## technological advances since inception

- ATM / telephone / online / mobile / banking apps
- adoption required staff training, capital investments
- 40 yrs ago ATM installation cost billions (building vestibules & reinforcing floors!)

## all to improve access to services

## consumer demand

- eventually Interac spread everywhere
- no longer asking “do you have interac”



# Restaurants & Hospitality

## Government regulations ie) non-smoking by-laws

- to improve customer service and access for smokers:
- patio heaters, non-enclosed enclosures

## Chains spend thousands on crayons to entertain

- cost of a few braille / large-print menus and value of preserving dignity & independence vs. crayons



# Retail

## \$15K/yr big box music

- On average, each big box store spends \$15K / year on background music because a study told them it increases sales
- What else increases sales? When the entire marketplace can access your goods and services!!

## the 'mommy market'

- baby change stations & stork parking once unheard of
- businesses adapted to accommodate the needs of their customers

## Sunday shopping hours

- Original objections: increasing costs for little benefit
- sales fixed - just spreading existing sales over entire week
- Actually example of increasing access to services creating new markets



# Opportunities of Accessibility



# Curb-cut Effect

*“the unexpected benefits inclusion & accessibility bring to society as a whole”*

- Steve Jacobs

named for literal curb-cuts

- one of first urban accommodations designed for persons w/ disabilities (Kalamazoo, 1945)
- benefits all: seniors, strollers, carts, bicycles, etc.



# Technology & Accessibility

Typewriter, telephone, tape recorder, and email all originally developed by, or for, persons with a disability

## 50 Years of Innovation

- |                             |                              |                            |
|-----------------------------|------------------------------|----------------------------|
| -Adding Machines            | Addressing Machines          | Autographic Registers      |
| -Automatic Check Endorsers  | Automatic Typewriters        | Billing Machines           |
| -Bookkeeping Machines       | Calculating Machines         | Cash Registers             |
| -Check Protectors           | Coin Changing Machines       | Coin Counters and Sorters  |
| -Combination Registers      | Computers                    | Copy Holders               |
| -Copying Machines           | Counting Machines            | Dictating Machines         |
| -Duplicating Machines       | Facsimile Machines           | Finding and Filing Devices |
| -Folding Machines           | Inter-communicating Machines | Numbering Machines         |
| -Paging and Calling Systems | Perforating Machines         | Postage Machines           |
| -Photo Copying Devices      | Scales                       | Signature Writing Devices  |
| -Slide Rules                | Stencil Cutting Machines     | Stenographic Machines      |
| -Tabulating Machines        | Teletype Machines            | Time Recording Machines    |
| -Tabulating Machines        | Typewriters                  | Visible Index Systems      |
| -Word Processing Machines   |                              |                            |



# Technology & Accessibility

## ALSO designed by / for people with disabilities:

- |                                    |                              |                          |
|------------------------------------|------------------------------|--------------------------|
| -Punch Card Computer               | Condenser Microphone         | Loudspeaker              |
| -Moving Coil Speaker               | Dynamic Microphone           | Stereophonic Recording   |
| -33-1/3 RPM Record                 | Book on Tape                 | Transistor               |
| -Speech Recognition                | Telephone Volume Control     | Sound to Light Converter |
| -Coin Operated Telephone Cubicle   | Personal Digital Assistant   | Flatbed Scanner          |
| -Conversion Printed Text to Speech | Vibrating Pager              | Alphanumeric Pager       |
| -High-Speed Reading Display        | Telephone Headset Amplifier  | Chiming Wrist Watch      |
| -Television Captioning System      | Voice Dictation System       | Screen Magnification     |
| -Noise-Canceling Microphone        | Talking Electronic Timepiece | Auto Dialer              |
| -Talking Solid State Timepiece     | Musical Keyboard             | Talking Multi-meter      |





# Impact on Education

Accessibility will have significant impact on attainment

- Better buildings, transportation, info & communication, etc.
- Could reduce likelihood of poverty for large # of Canadians



# Impact on Employment

Inclusion & access = cascading and cumulative effect

- access to education > employment > greater earning power > tax revenue
- more accessible spaces = increase employment opportunities



# Impact on Marketplace

## Inclusion & Diversity Drive Economic Growth

More Productive Spaces & Products

Increased Productivity, Innovation & Economic Prosperity

Extended Workforce Participation

Increased spending including Tourism & Consumer Retail Sectors



## Social & Economic Impact

### Price Tag Of Exclusion

Cost To The Family

Poverty & Disability

Cost To The Community / Social Programs

Healthier Society

#### Technology & Accessibility

Plus:

-Punch Card Computer	Condenser Microphone	Loudspeaker
-Moving Coil Speaker	Dynamic Microphone	Stereophonic Recording
-33-1/3 RPM Record	Book on Tape	Transistor
-Speech Recognition	Telephone Volume Control	Sound to Light Converter
-Coin Operated Telephone Cubicle	Personal Digital Assistant	Flatbed Scanner
-Conversion Printed Text to Speech	Vibrating Pager	Alphanumeric Pager
-High-Speed Reading Display	Telephone Headset Amplifier	Chiming Wrist Watch
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# Microeconomic Opportunities

To build the business case...

Accessibility expands potential market share

- #1.3 billion persons with disabilities globally (population of China) w/ \$1 Trillion to spend
- marketplace looking for accessible products, services & spaces = \$6.9 Trillion / yr
- By 2050, 30% of population of 64 countries over 60 years old
- Improves corporate perception, customer satisfaction & consumer loyalty
- Increased global demand for accessible products, services provides competitive advantage for accessible businesses

*“If you build it, they will come”*



# Return on Investment

## Investment Costs

Implementation costs

Enforcement costs

## Benefits of Inclusion

Value of preserving dignity & independence

Increased educational attainment

Improved productivity & innovation

More productive products, services & spaces

Increased revenue: tourism, retail, industry, etc

Greater participation in employment & society

Healthier society

Reduction in reliance on social programs

Curb-cut effect – Accessibility Benefits All

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**= Accessibility (Priceless)**



# Resources

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# Roll a Mile

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Accessibility - That's how we roll

