### "Making the Most of Uncertainty"

# Keith Culver PhD Professor of Management, UBC Penticton High graduate

(Gentle and constructive provocation of thought by a former picker of soft and hard fruits, driver of tractors, irrigation mover, waiter of Okanagan tables, etc.)



### The take-home message:

A 21<sup>st</sup> century city's long-term prosperity depends on its capacity to make friends with uncertainty.

Let's have a vision, strategy, and plan ready to take advantage of the unexpected.



### Just four steps...

- 1. What does a vision have to do with uncertainty?
- 2. 'Possibilistic' thinking in response to uncertainty
- 3. Key uncertainties facing Kelowna in the 21<sup>st</sup> century:
  - Who will live here?
  - What will this place be like?
  - What will everyone be doing?
- 4. Resilient planning



### 1. What does a vision have to do with uncertainty?

- High probability = easy planning
- Low probability = difficult or impossible to plan
- Uncertainty = lack of evidence for probabilistic judgment of where known facts or trends may lead...



### 1. What does a vision have to do with uncertainty?

- 25 year strategies are near-term reliable, longterm unreliable
- Periodic planning for probabilities may miss opportunities to prepare for uncertain but highimpact possibilities
- Looking beyond 25 year strategies makes for possibility-ready resilient 25 year strategies



### theguardian

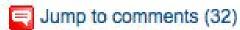
News Sport Comment Culture Business Money Life & style

News Science Geology

### Flawed earthquake predictions gave Fukushima a false sense of security

Japanese put their faith in a system that has consistently failed to predict the risk of major earthquakes, says scientist

Ian Sample and Justin McCurry theguardian.com, Wednesday 13 April 2011 17.18 BST









### Greenspan fears US government set for more debt stalemate



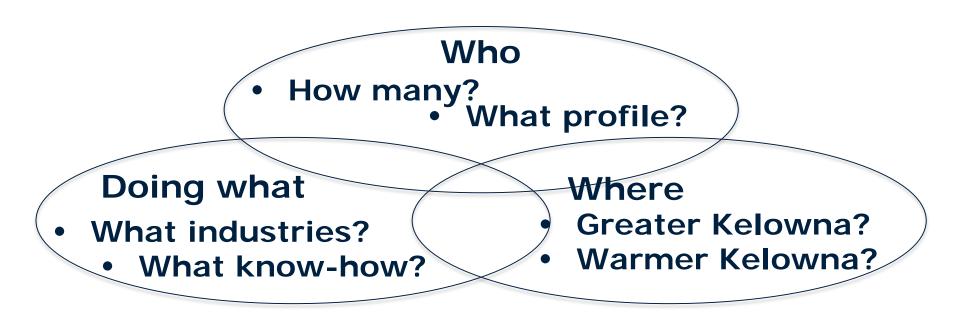
He said: "One thing that shocked me is that not only did the Federal Reserve's very sophisticated model completely miss (the crash on) September 15th, 2008, but so did the IMF, so did JP Morgan, which was forecasting American economic growth three days before the crisis hit, going up all through 2009 and 2010."

### 2. 'Possibilistic' thinking in response to uncertainty

- Tomorrow's future is made from today's facts
- Opportunity and challenge lie with highimpact uncertainty about future facts
- We can imagine how today's facts about high-impact uncertainty might create particular futures – and we can strategize to be ready for those futures

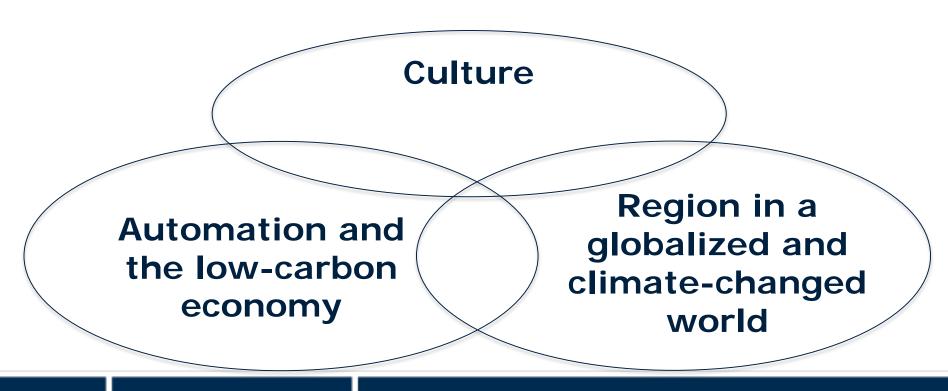


3. High impact uncertainties facing Kelowna in the 21<sup>st</sup> century: who will live where doing what in Kelowna?





3. Key uncertainties facing Kelowna in the 21<sup>st</sup> century: who will live where doing what in Kelowna?





### 3. Key uncertainties – culture past



c. 1910 Kelowna'spopulation was10% Chinese.

Chinese Freemasons, Kelowna



### 3. Key uncertainties - culture

### Kelowna today:

- Older than provincial and national averages
- More likely to have arrived via interprovincial and intra—provincial migration than international migration.
- Less ethnically diverse than provincial and national averages



### 3. Key uncertainties – culture

### Kelowna beyond 25 year planning:

- Older or younger than provincial and national averages?
- New to Kelowna or long-established in Kelowna?
- Globally-engaged?



### An uncertainty with impact:

Will our culture be multiage, multi-lingual, multipassport, multi-airmiles, globe-spanning in business and recreation?

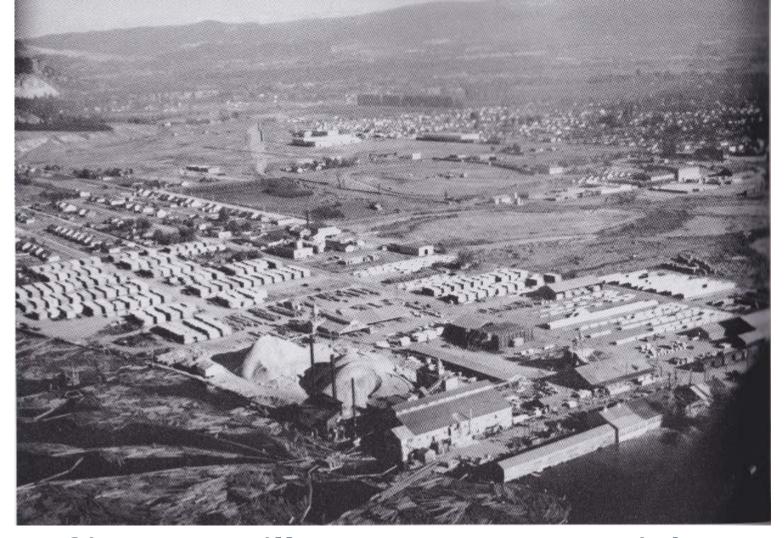


### 3. Key uncertainties – work

"We look forward to the building of a permanent industry that will make for the greatest possible use of wood that is grown in this part of the province. We trust, when the trees we have planted this spring on our Forest Management License are harvested, this company will still be contributing to the economic welfare of the province and to a better standard of living for the citizens of the Okanagan Valley."

SM Simpson, 1957 letter to the City of Kelowna





Simpson mill, 1950s – 400-500 jobs



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

### CBCnews | Technology & Science

Federal budget 2015

Mike Duffy trial

Tax season 2015

CBC investigates

Home

World

Canada

**Politics** 

Business

Health

Arts & Entertainment

Technology & Science

Trending

Weather

Video

Technology & Science

Quirks & Quarks Blog

Spark

Photo Galleries

### Robot starts work as greeter at Japanese department store

Humanoid robot Aiko Chihira uses sign language, can be programmed for other languages





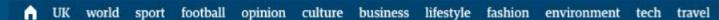
Stay Connected with CBC News



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

### theguardian



home ) tech

#### Robots

### Amazon moves one step closer toward army of warehouse robots

Robotics competition prize for best warehouse-working 'picker' machine awarded to robot designed by Dutch team





Kiva robots transport goods at an Amazon Fulfillment Center, ahead of the Christmas rush, in Tracy, California in 2014. Photograph: Noah Berger/Reuters



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

### THE GLOBE AND MAIL\*

Q~ Enter a term, stock symbol or company name

Hon	ne News	■0	pinion	■ Business		Investing	Spo	rts	Life	Arts	■ Tec
8	Streetwise	Econo	omy	Internation	al	Industry N	iews -	Sma	all Busines	SS	Commen
1	Energy & Resourc	es	Marketi	ing L	aw	Property I	Report				

Home » Report on Business » Industry News » Energy & Resources

#### Meet the oil patch fly boys

#### NATHAN VANDERKLIPPE

CALGARY — The Globe and Mail
Published Saturday, Jan. 21, 2012 8:00AM EST
Last updated Monday, Jan. 23, 2012 1:48PM EST

0 Comme



Ryan Whitman: Lives in Kelowna, B.C. A facilities operator at a Devon oil sands site, Mr. Whitman flies himself to Calgary, then catches a private plane north. He moved to Kelowna from Calgary last September – a perk of being able to air-commute is you can choose where you live. "The weather is way better than Calgary," he says. "This is a possibility with the fly-in, fly-out job." Plus, the seven straight days off are a perfect time for mini-vacations, like riding a motorcycle around B.C. The schedule, conversely, is good for days on, too: "Being able to be at work is kind of nice because then you can just focus on work."

### theguardian



home > environment > climate change wildlife energy pollution

# US and Canada promise to lead world to low-carbon economy

Countries previously seen as climate change villains present shared vision on cutting emissions as Justin Trudeau meets Barack Obama at White House



COLUMBIA

Obama: US and Canada 'fully united' in combating climate change

### An uncertainty with impact:

How could the new generation of automation and transition to a low-carbon economy help or challenge Kelowna?



# 3. Key uncertainties – Region in a globalized and climate-changed world

- Yes, Kelowna weather will be warmer, wetter (but much less snow), with summer droughts.
- What does climate change mean for Kelowna's 'relative regionality' in an urbanizing world?



Home | About ~ | Topics ~

Overview

Home > Topics > Urbanization

Urbanization

The world is undergoing the largest wave of urban growth in history. More than half of the world's population now lives in towns and cities, and by 2030 this number will swell to about 5 billion. Much of this urbanization will unfold in Africa and Asia, bringing huge social, economic and environmental transformations.





### The Telegraph



HOME » NEWS » WORLD NEWS » ASIA » CHINA

### China to create largest mega city in the world with 42 million people

China is planning to create the world's biggest mega city by merging nine cities to create a metropolis twice the size of Wales with a population of 42 million.



### PENTICTON HERALD

HOME NEWS → SPORTS → BUSINESS NEWS → LIFE → OPINION → CLASSIFIEDS → CONTE

# Penticton only Okanagan city to see population shrink in 2015





Posted: Thursday, January 21, 2016 5:03 pm

Andrea Peacock Special to the Herald | 

0 comments

Growing faster than the majority of the province, West Kelowna has bumped Penticton out of the No. 3 spot on the list of most populous cities in the Okanagan.

Population estimates from BC Stats indicate West Kelowna grew 5.3 per cent from 32,744 in 2014 to 34,484 in 2015.

Meanwhile, Penticton's population decreased by 0.25 per cent from 34,050 to 33,854.

### An uncertainty with impact:

Whether (transboundary?) regional portal to world or end of road destination, what opportunities and challenges come from global climate change?



# Let's make sense of complex chains of possibilities:

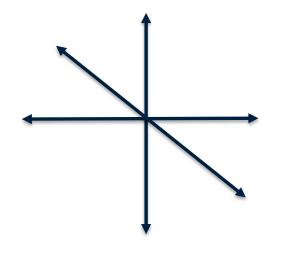
- 'Memories of the future'
- Stories of possibility aren't inherently positive or negative – there are opportunities in every scenario
- Adaptation to future possibilities can begin with choice now



Diverse and globe-trotting culture

Regional portal with minimal climate disruption of

Automation + low-carbon creates new niche jobs



End-of-road destination with periodic disruptions

Automation + low-carbon reduce total jobs without replacement

Cultural enclaves preferring the local





### 4. Resilient planning

Use credible stories about high-impact uncertainties as:

- Tests of your vision and strategy for readiness to face the possible
- 'Radar' seeing high-impact uncertainties becoming probabilities ready for planning
- Shared 'memories of the future' supporting council discussion about complex future situations...



### 4. Resilient planning

Take home message redux:

The *best* vision, strategy and 'Plan A' are resilient across *both* probable and possible futures.

Holders of more than one 'Plan A' may be best poised to thrive in the 21st century – fail to plan, plan to fail.



### "Making the Most of Uncertainty"

# Keith Culver PhD Professor of Management Associate Dean for Regional Innovation Practice UBC's Okanagan Campus

