What would it take for you to go all in on a strategy?

How would you adapt if you knew the economy is cooling off?

If it was expanding?
Questions to Frame Our Conversation

• What has been the single biggest external impact on your organization over the last 12 – 18 months?

• What have you done in the last 6 - 9 months to position your organization to succeed over the long haul?

• How will the organization look different in 2019 than it did in 2017?
What is the New Normal?
Yesterday’s Battlefield

The Good Ole Days

• Past was a good indication of the future
• Data was scarce and hard to find
• Lines of communication were unreliable
• Execution starts at the top
Disruptors are Everywhere

Today’s Trending Technologies

• Online Retail / Amazon Prime
• Multi-Family Homes / Rentals
• AUTON vehicles / Kangaride
• PayPal / Bitcoin / Elec Banking
• E-Learning / Professional Dev.
• Livehealthonline / Fitbit
• Hoteling / Telecommuting
• JUST EAT / Uber Eats
• Netflix / iTunes / Sling / Prime
• Ankle Bracelets & GPS
• Airbnb
• GoodFood/ Cook it / MIssFresh

Construction Projects

• Shopping Centers / Strip Malls
• Single-family Homes
• Dealerships & Roads
• Bank Branch Offices
• University Campuses
• Healthcare (Hospitals)
• Office Buildings
• Restaurants
• Cinemas / Theaters
• Prisons
• Hotels
• Grocery Chains
Conversations to Have

Determining the Impact on Your Business

What are the implications for….

• **Speed** of service levels?
• **Response** time of business?
• **Cost** of products and services?
Trends Shaping the E&C Industry

- Availability of labour
- Megaproject proliferation
- Technology advances
- Strategic risk management
- Mergers and acquisitions
- Low-cost natural gas
- Succession & continuity
- Commercial building
- Business intelligence
- Flat organizations
**Strategy & Vision**

Only Two Questions

WHERE to play?

HOW to win?

Goals  Objectives  Strategy  Tactics
### 4 C Strategic Platform

#### Genesis of Market Context

**Climate (Opportunity)**
1. Market profile in terms of size, growth, segmentation, trends and drivers, regulation. How is the market changing? Where is it going?

**Customers (Channel)**

**Company (Ability/Strategy)**
2. Who are the primary customers? What type services are they buying? What do they value? What are the buying practices and selection criteria? How is the company perceived relative to the best competition? Likelihood to recommend?

**Competitors (Obstacle)**
3. Who are the major competitors? How does the market perceive their strengths & weaknesses? Positioning within the market? Where is there “white space”?

**Internal**

**External**

4. Is the company advantageously positioned to exploit these opportunities? What needs to change? Resources?
Looking Beyond the Horizon
Market Place & Company
Energy Provides a Competitive Advantage

Energy Landscape 2016

- Canada’s energy sector
  - Directly employed more than 270,000 people
  - Indirectly supported over 600,000 jobs
  - Almost 7% of Gross Domestic Product (GDP)

- Energy sector composition
  - Natural gas 32.3%
  - Electricity 29.7%
  - Pulping liquor 9.6%
  - Wood 7.7%

- Prior to 2011, electricity was the largest source of energy consumed by the manufacturing industry. Afterward natural gas took the lead

- In 2016, the top consumers of energy were paper (25.1%), primary metal (22.5%), petroleum and coal products (14.0%) and chemical (14.0%) manufacturers, which combined accounted for 75.7% of the total energy consumed.

2011

Electricity to Natural Gas
Canadian Employment

Dip Experienced in January 2018

Source: Statistics Canada, Labour Force Survey
January 2018 Labour Market Report:
Comparative growth in electricity prices, inflation, the economy, and income, Ontario, 2008 to 2015 (2008=100)

Sources: Statistics Canada, CANSIM Tables 326-0021, 384-0040; calculations by authors.
Comparative growth in electricity prices across provinces, 2008 to 2016

Sources: Statistics Canada, CANSIM Table 326-0021; calculations by authors.
Producers & Consumers

Ingredients of Growth

Total Consumption

- Primary Metals 38.0%
- Paper 22.1%
- Chemical 12.4%
- Wood Products 3.9%

76.4%

Natural Gas Price Forecast

*GMP FirstEnergy, AECO Cdn $/mcf

43% Change
Per Capita Income

Income Per Capita, Provinces and International Peers, 2016
(US$ at purchasing power parity, constant prices)

Sources: The Conference Board of Canada; Statistics Canada; OECD.
Demographic Trends

Canada’s Population is Expanding and Changing Rapidly

• Canada’s population has grown approximately 1% per year between 2011 and 2016
  • Fastest growth among the G7 nations
  • 1.7 million more people than 5 years ago
  • Immigration contributed two-thirds of that increase
  • Alberta fastest growing at 23%

• Median age changing dramatically
  • 27 years old in 1956
  • 40 years old in 2017
  • Estimated at 47 years old in 2056

SOURCE(S): STATISTICS CANADA
Labour Trends

Looking to the Future

• In the next decade, Canada will see more than one-fifth of the construction labour force retire from the jobsite.

• In 1996, Canada’s construction sector employed 712,000 people. Today, that number has grown to 1.4 million. By 2027, however, about 21 per cent of the labour force will be older than 65 years old.

• Fueling the labour gap is less youth entering the construction field.
  • In 2007, about 13 per cent of the labour force was retirement age, with youth entering the field accounting for about 14 percent of construction employment.
  • By 2027, 21 percent being retirement age with youth entering the workforce will fall to about 10 per cent of construction jobs.
## Looking at the Population

### The Looming Talent Crunch

<table>
<thead>
<tr>
<th>Generation</th>
<th>Age</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918 and before</td>
<td>93 years and over</td>
<td>91,195</td>
<td>0.3</td>
</tr>
<tr>
<td>Parents of baby boomers (1919 to 1940)</td>
<td>71 to 92 years</td>
<td>3,074,045</td>
<td>9.2</td>
</tr>
<tr>
<td>World War II generation (1941 to 1945)</td>
<td>66 to 70 years</td>
<td>1,444,035</td>
<td>4.3</td>
</tr>
<tr>
<td>Baby boomers (1946 to 1965)</td>
<td>46 to 65 years</td>
<td>9,564,210</td>
<td>28.6</td>
</tr>
<tr>
<td>Baby busters (1966 to 1971)</td>
<td>40 to 45 years</td>
<td>2,823,840</td>
<td>8.4</td>
</tr>
<tr>
<td>Children of baby boomers (1972 to 1992)</td>
<td>19 to 39 years</td>
<td>9,142,005</td>
<td>27.3</td>
</tr>
<tr>
<td>Generation Z (1993 to 2011)</td>
<td>18 years and less</td>
<td>7,337,350</td>
<td>21.9</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, Census of Population, 2011
Macro Trends Impacting the Industry

Winds are Changing

• Worker shortages and skilled labour challenges - The biggest challenge facing Canada’s construction industry is offsetting a rapidly aging workforce.

• Low oil prices also prompted a decline in engineering, institutional, and industrial construction that is set to hold steady through to 2019.

• Demand for new housing slowing down, despite slight growth in renovation work.

• Canadian construction sector’s productivity growth is highly cyclical and often locked into a “vicious productivity cycle.”
Underlying Economic Shift

Housing & Consumer Impacts

[Graphs showing mean and median age trends over time in Canada and the United States, with separate lines for men and women.]
Construction Spending and Forecasted Growth

Forecast 2018 - 2022

Compound Annual Growth Rate (2017 through 2022)

Construction Spending Put in Place 2022 (CN$ Billions)
Construction Spending Forecast ($M)

2017-2021 USD Forecast

NOTE: NOVA SCOTIA REPRESENTS SPENDING FOR THE COMBINED ATLANTIC PROVINCES (NS, NB, PE, NL). ALL AMOUNTS IN MILLIONS OF NOMINAL USD($)
SOURCE(S): GLOBAL INSIGHT, FMI
NOTE: NOVA SCOTIA REPRESENTS SPENDING FOR THE COMBINED ATLANTIC PROVINCES.
SOURCE(S): GLOBAL INSIGHT, FMI
Two Fundamental Economic Drivers Impacting Jobs

• Human Genius & Creativity
  • The O-Ring Principle

• Human Insatiability
  • We can never get enough
Employment Growth

Share of US Workers

1979

Low Skill: 13.7%
Medium Skill: 61.1%
High Skill: 25.2%

2016

Low Skill: 18.2%
Medium Skill: 43.2%
High Skill: 38.6%
U.S. Forecast
Q4 2017 U.S. Markets Construction Overview

*Improvements include additions, alterations and major replacements. It does not include maintenance and repairs.
Recovery Concentrated in Select Metro Areas
Key Indicators Suggest High Growth Potential in the South and the West

Demographic Forecast Growth

Source(s): Woods and Poole
Looking at Mexico
Advent of Mexico Infrastructure Improvement

Source: Tacna Services

President Enrique Pena’s National Infrastructure Program

- Commissioned in 2014 to modernize infrastructure
- $600 billion USD – about 8% of GDP
- Targeting 750 specific projects

- Current priority is overhauling the energy and transportation sectors
  - New ports
  - Expanding existing ports
  - Paving more roads
  - Extending railways
  - Expanding electricity generation capacity
Appliance Manufacturing in Mexico

Source: The Offshore Group

• Manufacturing cost advantage over China

• Leading appliance supplier to U.S., Canada and South America

• Large network of qualified suppliers
  • Plastic materials production
  • Thermodynamic processes
  • Metal stamping
  • Etc.

63% Natural Gas

4% Electricity
Conversations to Have
Five Key Questions

• What is your point of view of where the economy is headed?
• What do you need to do to get ready for the looming talent shortage?
• What does the ‘New Normal’ mean for your and your team?
• What will it take to continue to be relevant in the future (i.e. internally & externally)?
• What do/can customers get from you and the company they cannot get from someone else?
4 C Strategic Platform

Questions to Ponder

**Climate**

a. What are the economic trends and implications we are facing?
b. What are the macro market drivers and the potential impact on us and our customers?
c. How are governmental regulations changing?
d. How will changing demographics impact the climate in which we operate?
e. How is technology changing in the greater economy and what is its impact (e.g., autonomous vehicles, telecommuting, etc.)?

**Competitors**

a. What key initiatives are they pursuing that might give us a competitive disadvantage?
b. Who are their key market influencers, and will that give them a leg up when it comes to winning work?
c. What is their backlog like and does that signal they will be more or less aggressive in the market?
d. Are we at risk from non-traditional competition (e.g., a fabricator coming into the market impacting what and how customers buy)?
e. What are their differentiators and how do they compare to ours?

**Customers**

a. What is their preferred buying process?
b. How do they evaluate our performance and that of our competitors—who is the preferred provider?
c. What are their emerging or unmet needs?
d. What trends are impacting their businesses that might change how they approach their construction projects?
e. How is their buying process changing—who is involved, what is important, etc.?

**Company**

a. Which are our best customers and projects—and what do we provide them that sets us apart from the competition?
b. What is our bench depth and how will that impact our ability to perform on projects and be profitable?
c. What is our go-to-market strategy and are we getting the full return on our invested efforts?
d. How do we get positioned to win earlier in the process and therefore drive up our win rates?
e. How can we leverage technology to increase customer loyalty and improve profit performance?
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- Owners