



Are you ready for the next big thing?

Check out the trends that might affect your supply chain operations

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Few phenomena in Canadian history affected business like the 1970's victory of the Parti Quebecois and the legislation that government enacted.

The timing was good for John Boyd Jr's father, who founded site selection consultancy The Boyd Company, Inc, in 1975. "Some of our first projects were related to Bill 101," says Boyd, now the Princeton, New Jersey company's principal, referring to companies leaving Quebec for friendlier locales.

Recent political developments don't seem likely to create the same upheaval, but a discernible leftward shift has set some business pundits aflutter.

While political upheavals have been hogging 2015 headlines, other, equally important macroeconomic factors seem set to affect supply chains. Here's an overview of developments that may bring changes in the next year.

Technology

Andrew Zatlin's experience tells him that, on net, new technology creates jobs. The founder of San Mateo, California-based Southbay Research, recalls an experience at the port of Oakland

where containers carrying RFID tags put an end to workers walking from box to box with clipboards. "There might be job loss on one hand," admits Zatlin, "but there's job creation at the internal distribution side."

Game-changing technologies seem set to drive business evolution in 2016 too.

Uber trucking

Instead of ordering a cab, many people use Uber on their phones to call a ride. Soon, supply chain workers might use Uber-like systems to move goods at lower cost and greater efficiency.

Traditionally, shippers and their customers plan shipment dates well in advance, an arrangement as flexible as waiting for a bus, even if the parties themselves arrange the time when the truck pulls up. Meanwhile, said truck racks up empty miles before and after the trip.

Now, several US-based startups are bringing the Uber concept to the supply chain. Customers can enter just-in-time requests for transportation and the system checks carrier schedules to find room on a truck whose schedule and route match the shipper's needs.

If such arrangements pan out, customers can move goods when they want, possibly at prices below current market rates. (Caveat: expect carriers to charge what the market will bear. Real-life Uber experiences suggest Uber-trucking apps would automatically raise rates when and where demand rises.)

Carriers would find "drive-by" business they wouldn't otherwise get. Other motorists might experience less road congestion.

Improving the driver's job

Proponents of modern automatic transmission-equipped trucks claim they reduce driver fatigue and make drivers more productive. Other advances will further these aims even more. Several years ago, I experienced smoothly flowing traffic on Highway 404, just north of Toronto, with hands off the wheel and feet off the pedals. Adaptive cruise control kept the car a safe distance behind the vehicle ahead. Lane-keeping technology ensured the vehicle stayed in its lane.

Volvo is already testing trucks that self-drive on the road in Europe. When this “self-driving” technology spreads, drivers may end their workdays with more gas in the tank, both literally and physiologically making them and their vehicles better able to handle any requests for overtime.

Robots in the distribution centre

Companies like Kitchener, Ontario-based Clearpath Robotics and Boston, Massachusetts-based Rethink Robotics are marketing autonomous robots that manage low-value materials handling and movement. As the cost of their technology falls, expect interest in their evolving offerings to rise.

Drones

Young children play with them. Why shouldn't adults in the supply chain have some fun too, drop-shipping product more quickly than ever before while they're at it? Southbay's Zatlin likes the idea at face value, but he contrasts a van filled with packages versus a drone that does one or two deliveries. “I don't get it yet,” he admits. “Maybe it's a purely urban experience.”

Boyd is bullish. “I think of drones not in the context of George Orwell's 1984 but in terms of Steve Jobs's 1984,” he says.

International trade deals

On October 5, 12 Pacific Rim countries reached agreement on the Trans-Pacific Partnership (TPP). Ratification isn't guaranteed, and strong opposition to the agreement remains.

But Mario La Barbera figures it's just a matter of time. “It's an opportunity for Canadian manufacturers to go global and get bigger, take advantage of economies of scale,” says the president of Quebec-based logistics firm Pival International.

He doesn't see much difference between the TPP or NAFTA, or the FTA before that. “It's just the evolution of the liberalization of the economy,” he says. “It's an unstoppable trend, like e-commerce.”

The effects of a ratified TPP may take a long time to materialize, so business will likely have time to adapt. Zatlin notes that trade liberalization between the US and Mexico has led to greater usage of west-coast Mexican ports, with their lower labour costs, to bring goods from

the Orient into North America. "But it took decades to make it happen," he notes.

Boyd figures the Pacific Northwest ought to emerge as a winner in the deal. "Asia has an insatiable appetite for US and Canadian-branded food and beverage products," he says.

Real estate

Logistics and supply chain may be the commercial real estate market's hottest sector right now. Along with that activity comes greater scrutiny of location choices. Access to labour plays a large role in those choices.

Colin Alves, a Toronto-based senior vice-president with Colliers International, often talks to clients about "all the things that come into play when headcount becomes a significant part of the operation" like getting labour to and from their facilities, since they're seeing more people in these buildings.

Boyd recalls how, a decade ago, distribution centres "went to hinterlands, where highway infrastructure was the major criterion. Now they're close to major population clusters with good rail access and proximity to deep-water ports."

Fuel costs

Gas prices will remain low thanks to a world-wide petroleum glut that won't abate any time soon. Even the once-mighty OPEC doesn't seem to be able to move the needle.

"The US is one of the world's largest oil producers, and Canada is producing a good share too," says Andrew Duguay, a Boston-based senior economist at data forecasting firm Prevedère Software. "Economies that were reaping the rewards of \$100-a-barrel oil will suffer," he adds.

In the days of \$140-a-barrel oil, "we saw a decentralization of distribution centres," Alves says, to cut fuel costs by shortening delivery routes. He figures decentralization will continue even in an era of low fuel costs, thanks to factors like the imperatives of same-day delivery.

Influence of e-commerce

Amazon and other e-commerce giants are reshaping distribution centres and delivery networks. "Heights are now being pushed up to 36, 40 feet in some cases to accommodate multi-level mezzanines," says Alves.

Companies increasingly talk about how quickly they can get product to the customer. "There's a whole conversation around the final mile," he says.

Updated buildings

"The next wave of speculative development we'll see in large North American industrial markets will feature LEED-certified buildings," Alves predicts, particularly as the industry recycles antiquated industrial real estate.

"The old products are being knocked down, if that makes economic sense, and new buildings are being put into production."

Labour

The market for unskilled labour seems tilted south. Boyd says many businesses look with favour upon right-to-work states, where unions are severely restricted. "We regard (Canada) the way we would a heavily unionized state like Connecticut or Massachusetts," he says.

Unskilled labour is easier to find than skilled workers. Duguay's data shows that wages for qualified labour are rising faster than wage inflation on a national level in the United States. "When you go to college, (distribution) isn't one of the 'hot' industries to get a three- or four-year degree in," Duguay notes.

Energy prices

"I've had many clients investigating opportunities across the border for the considerably lower energy costs," Alves says. Little wonder: modern distribution centre designs call for greater electricity loads.

"If you have a multi-level mezzanine, your lighting requirements increase dramatically," Alves offers as an example. "You're probably running some sort of conveyor material handling system that draws power. No longer is it simply charging stations for your forklifts."

Tumbling energy prices, cheap water and great infrastructure in North America lead Zatlín to wonder whether companies will bring manufacturing back home. "Let's face it: manufacturing in China is a hassle," he says, noting the inconvenience of working across many time zones, quality control and language barriers.

“Reliance on cheap energy is fine in the short term,” he adds. “You live by the sword, you die by the sword.”

Zatlin also notes mounting interest in clean energy. “It’s easy to say oil’s cheaper, but that’s sloppy thinking,” he says. “We’ve invested untold amounts of money into infrastructure for the oil industry. If we invested a similar amount into renewables, renewables would be much cheaper.”

Predicted legislative changes

The Liberal Party won the 2015 federal election.

Earlier this year, Alberta bid farewell to its longtime Tory government and elected the New Democratic Party. In Ontario, Kathleen Wynne’s Liberals won a majority government in 2014. These elections indicate a leftward shift in the political spectrum.

Does this mean anti-business concerns are justified? Maybe not. Boyd notes many “lefties” implement measures like infrastructure spending and workforce training.

Wynne’s Liberals forged ahead with the sale of a part of Hydro One. Some of the proceeds will fund much-needed upgrades to the province’s electricity grid.

The federal Liberals plan to incur debt now that interest rates remain stuck at historic lows (what better time to borrow?) to build infrastructure that ought to benefit Canadian businesses and citizens alike.

“During recessionary periods, countries tend to get more focused. Canada doesn’t need to spend on its military,” Zatlin says. “That’s one way to shift the budget around a little. It could also be part of the zeitgeist of Canada.”

La Barbera figures change was necessary sooner or later. He recalls a business event where former Prime Minister Stephen Harper asked him only one question: “Did you make money?”

“That summarizes how the Conservatives look at things,” La Barbera says. But he also acknowledges the externalities that aren’t always openly talked about. “We seem to be offside with the rest of the world striving to be more environmentally sensitive,” he says. “We may as well face realities sooner. We need to be more creative in how we make money, but not at the expense of the environment.”

La Barbera notes that Canada's corporate tax rate still compares favourably to that of the United States, while US taxes are also rising. Facts like these should assuage any nervousness in the Canadian supply chain.

Boyd notes that Prime Minister Justin Trudeau has drawn comparisons to JFK Jr. "He might leverage his celebrity, his brand to attract industry to Canada."