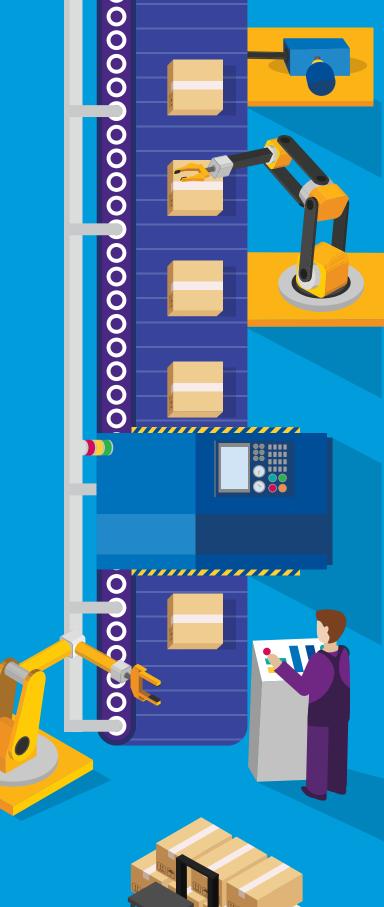
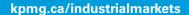


# Make it happen

**Canadian Manufacturing Outlook 2016** 





# Make it happen

More than 220 executives from across the country shared insights about their companies and the future of Canadian manufacturing.

# What Canadian executives are saying...

57%

consider exploiting opportunities for growth as their top strategic priority today

40%

do not believe they have the resources to properly manage their supply chain

Factors that will impact growth over the next 3 years

46%



44%



41%



**Currency fluctuations** 

Economic growth

Pricing pressures

"Our 2016 Canadian Manufacturing Outlook survey results show the need to push forward, move beyond traditions, and keep pace with the world."

**Don Matthew** 

National Sector Leader, Industrial Manufacturing, KPMG



# Over the last 2 years...

67%

have achieved some or all of their growth objectives among those that have undergone a merger or acquisition 51%

have spent less than 3 percent of their revenues on R&D and innovation

In the next 2 years...

55%



see growth as their top strategic priority

bb%

are focusing on entering new geographic markets

8

are focusing on increasing market share within existing geographic markets/sectors

"Manufacturers across the globe are being challenged to break free of well-worn strategies and pursue growth outside their current market. The time is now to make it happen."

**Bob Jolicoeur** 

National Industry Leader and National Sector Leader, Chemicals, Industrial Markets, KPMG

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# Foreword

The way ahead is not for the timid, but neither is it for the unprepared. Emerging markets, global competition, and technological trends are shaping the manufacturing industry at record speeds. In response, manufacturers across the globe are being challenged to break free of well-worn strategies and pursue growth outside their current markets.

For Canadian manufacturers, this is easier said than done. While we have traditionally been more risk averse than our global peers, the evidence is clear that ambitious global competitors such as China and Japan are not waiting for us to make our move.

Canada is known for its risk averse nature, economic reservations, and preference for staying close to home. Now, however, to be apprehensive about new markets, investing in research & development (R&D), and embracing supply chain efficiencies is to leave markets and sectors open for the taking.

Certainly, the clock is ticking. And while Canada's manufacturing sector has the skills, confidence, and tools for growth, our findings reveal a need to build upon those capabilities with greater innovations, collaborations, and a stronger appetite for opportunities beyond the United States.

There are many opportunities ahead, but taking the next steps requires an understanding of where the industry is today. In this report, we've engaged Canadian manufacturing leaders across the country to better understand their outlook and ambitions, compared to those of their provincial neighbours, Canadian peers, and global counterparts. What we've found is a need to push forward, move beyond traditions, and keep pace with the world.

Truly, the time is now to make it happen.



**Robert Jolicoeur** National Industry Leader and National Sector Leader. Chemicals, Industrial Markets **KPMG** 



**Don Matthew** National Sector Leader, Industrial Manufacturing **KPMG** 

# Growth on a global scale

#### Make your move

The message from Canadian manufacturers is clear: the time for growth is now. While many are taking steps to stay competitive on their home soil, our survey reveals a slower and more cautious approach to global growth than international competition. And in the age of rapid expansions, emerging markets, and technological breakthroughs, speed is a winning factor.

The good news is a majority of Canadian manufacturing leaders are "talking the talk." More than half (57 percent) have currently made exploiting opportunities for growth a top strategic priority, with only slightly less (55 percent) insisting it will remain a priority over the next two years. What's more, a majority of manufacturing leaders are eyeing growth rates of up to 5 percent in the year ahead, while one-in-five are forecasting a rate of 10 percent or more.

These forecasts are driven by a healthy level of optimism among Canadians for both the growth of their companies (86 percent are "confident" or "very confident") and industries (68 percent).

By these numbers alone, it would appear Canadian manufacturers are cautiously optimistic about the days ahead. However, another story emerges when comparing Canadian growth projections against those from both domestic CEOs and their global counterparts.

In KPMG's CEO Outlook 2016, for example, the levels of confidence among Canadian business leaders eclipses those in the manufacturing sector across

#### Strategic priority over the next 2 years



Develop new innovative products and processes

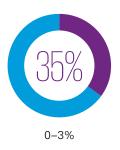


Reducing costs and performance management

current business

operations

#### Growth rate in next 12 months











all categories (company, industry, global economy, and country). Meanwhile, KPMG's 2016 Global Manufacturing Outlook shows global manufacturers are eyeing a more aggressive approach to growth, with nearly three-guarters saying growth is a "high" or "extremely" high priority over the next two years.

More than bold words, global manufacturers are "walking the walk" with equally aggressive strategies for entering new markets and sectors, stronger plays for innovation, and higher tolerances for risk than Canadians.

So while it's clear Canadians are targeting growth, are they keeping pace with the rest of the world?

"One thing that really stands out from this year's report is the fact we have to encourage Canada to speed up and get going because we're being left behind in the global marketplace," offers Don Matthew, National Sector Leader, Industrial Manufacturing, KPMG. "We're still lagging behind our global peers in R&D, innovation, and speed to market. We're doing the right things, but we have to quicken our pace."

Thanks to the participation of manufacturing respondents around the country, we have the data, insights, and comparisons to explore Canada's manufacturing industry in depth. Yet if there's one truth that stands out above all, it is that it's time for Canadians to get moving.

"It's clear Canadian manufacturers are highly confident in their own ability to grow. They recognize the challenges they face in the form of currency volatility, slow growth in domestic and world markets, pricing pressures, and rising business costs."

#### **Jayson Myers**

President & CEO, Canadian Manufacturers & Exporters (CME)

# An economy at odds

# **Economic anxieties are holding Canadians back**

Canadian manufacturers may have high hopes for their companies and industries, only that's where their optimism ends. Less than half share confidence in the country's economic future, and only one-third are confident in the state of the world economy going forward.

Here again, Canadian manufacturing executives show less confidence in the growth prospects for their domestic and global economies than both international manufacturers and other Canadian CEOs (from KPMG's CEO Outlook 2016, 60 percent of Canadian CEOs are confident in Canada's growth and 72 percent for global growth).

Global executives either match or exceed Canadian manufacturers in their level of confidence across all categories. This suggests both a more pessimistic view amongst Canadians and a more experienced perspective and/or greater confidence amongst global manufacturers in the face of cloudy economic conditions.

"A large number of executives see challenging times ahead, acknowledging that their organizations are facing significant risks in achieving their growth agendas," says Bob Sacco, GTA Trade and Customs Practice Leader with KPMG. "The challenges posed by the current economic climate may provide companies with potentially compelling reasons to focus on customs planning, perhaps now more than at any time in several decades."

#### Level of confidence in growth prospects

	Canada (over the next 3 years)				Global (over the next 12–24 months)			
	The Canadian economy	The Global economy	Your industry	Your company	The local economy	The Global economy	Your industry	Your company
Very confident or confident	45	36	68	86	57	46	61	64
Neutral (%)	40	45	21	11	31	30	22	23
Not very confident or not at all confident	15	20	11	3	11	23	17	12

The economy is also at the top of Canadians' minds when predicting the external factors that will impact their companies' growth in the next three years. When asked to predict which of those factors will have the most influence on future growth, 46 percent of executives cited currency fluctuations, followed by economic growth (44 percent), and pricing pressures (41 percent). On the opposite end, factors such as disruptive technologies, trades and customs risk and opportunities, and lack of infrastructure, were ranked lowest in terms of their perceived impact on growth moving forward.

under that level for the near future. These predictions persist despite increasing volatility caused by global economic downturns, potential regional upheavals (e.g., "Brexit"), and political rumblings over free trade agreements.

What is interesting, however, is where manufacturers' see that dollar going over the coming years. Half of the

survey's respondents base their growth projections on a

sub-US\$0.80 dollar, with a majority predicting it will remain

#### An ideal rate

The manufacturing industry is intrinsically tied to the health of the Canadian dollar, so it's no surprise that nearly half of Canadian manufacturers believe currency fluctuations will hold the largest effect on their success.

#### The pricing pinch

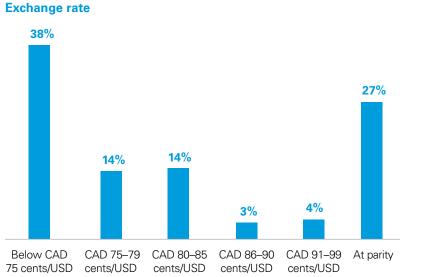
Pricing pressures are also causing Canadian manufacturers to lose sleep. The blame is falling largely on over-supply fueled by countries like China, where past stimulation activities have culminated in significant boosts to capacity and production, and a global excess of goods.

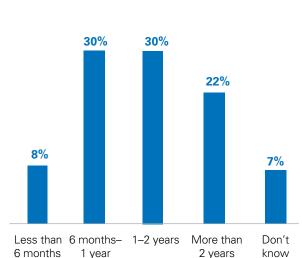
"Our members in the plastics industry, while continuing to find innovative ways to grow their businesses, tell me that increasing input costs are affecting their bottom line. Many businesses find it a challenge to remain competitive while contending with the various external factors impacting growth, including the rising costs of labour, raw materials, and in Ontario, the rising cost of hydro."

#### **Carol Hochu**

President and CEO of Canadian Plastics Industry Association (CPIA)

#### Exchange rate and Canadian dollar





Canadian dollar below 80 cents

"After the last great recession, we saw countries like the US and Canada invest close to 3 percent of their GDP\* into infrastructure and make-work projects in a bid to re-energize their economies. Meanwhile, China spent closer to 15 percent of its GDP on building new capacity," offers David Podruzny, Vice President, Business and Economics and Board Secretary, Chemical Industry Association of Canada (CIAC). "Now, as we've levelled off, we have a huge over-supply that appeared first in steel and aluminum, and then in chemical commodity areas, and today in just about any commodity you can think of."

\*Source: Financial Post, 2011, http://business.financialpost.com/news/economy/infrastructure-spending-key-to-economic-growth-cibc

No doubt, pricing pressures are a cause for concern — especially when compounded with tighter economic conditions, greater demand for talent, and supply chain challenges. Nevertheless, Canada produces much more than what its 35 million people need, be it precious metals, oil and gas, food, agri-business, softwood lumber, or any number of goods. Therefore, as global competition intensifies, manufacturers must look at more global joint ventures and other strategies to access those global markets. At the same time, similar big moves from countries like China and Japan should serve as incentives for action, and not deterrents to growth.

"From a business risk standpoint, one of the most significant factors is the labour and skills shortage – particularly in the manufacturing sector. That's why we're working with the Ontario government through the Youth Skills Connection program to develop "non-traditional" training that is industry-led and delivered; providing youth that meet specific aptitude criteria an opportunity to receive training while learning and living the company's culture. Another challenge that faces many SMEs is participation in innovation, do they have the resources, how can they access funding. We're working together to build a well connected R&D community to facilitate engagement, assist in finding and navigating the programs that can help them overcome this hurdle."

#### **Moira Harvey**

Executive Director, Ontario Aerospace Council (OAC)

### Ontario-Québec comparison: Growth

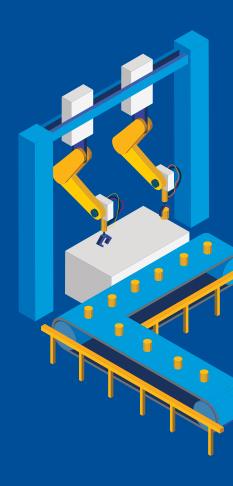
A majority of 2016's survey respondents are headquartered in Ontario and Québec (30 percent and 25 percent, respectively). This provides some compelling comparisons between the two provinces when it comes to their outlooks on growth.

For example, while both sets of provincial players agree that economic growth will play a key factor in their companies' growth, only 24 percent of Québec respondents cite labour and skill shortages as another leading factor, compared to 40 percent of Ontarians who said the same (and 32 percent of Canadian respondents overall).

Elsewhere, over half of Québec participants believe that disruptions in their sector caused by new entrants and technologies will be a significant business risk, compared to only 28 percent of Ontario respondents who say the same. Two-out-of-three Ontarians also believe that the government can provide greater innovation for support by increasing its funding for R&D, compared to little over half of Québecers who agree.

"The trend from recent years continues. Although finding skilled labour remains a challenge in both Ontario and Québec, manufacturers across the country are recognizing that "the time is now": They have healthier balance sheets, enjoy lower interest rates, a favourable currency window that seems to be open for some time, and as KPMG's Focus on Tax 2016 recently indicated, a relatively favourable tax environment for Canadian companies – all these factors are having a positive influence on the outlook for Canadian manufacturing."

Laurent Giguère
National Sector Leader, Transportation, KPMG



# Leading the way in M&A

#### Collaborations proving key to growth

Global volatility, pricing pressures, and fiercer competition are paving a challenging road ahead. Yet where some might be taking those roadblocks as signs to stay idle, many Canadian manufacturers are turning to mergers and acquisitions (M&A) for a proven growth strategy.

Just over one-quarter of Canadians have engaged in M&A activity over the last two years. Of those companies, 67 percent have achieved some, most, or all of their growth objectives in the process (12 percent even "surpassed their growth objectives"). Naturally, this has created an increased appetite – or at the very least, awareness – for M&A activity.

"Canada's M&A activity is high when compared to the rest of the world, and that's not surprising since many see it as an effective means to access new companies and markets in a very slow economy," observes Peter Hatges, President of Corporate Finance Inc. and National Sector Leader, Automotive, KPMG. "Plus, with 60 percent of the respondents expecting growth to be between 3 percent and 10 percent, and one-third of all respondents expecting growth over 5 percent, we believe this will have to be achieved in part with M&A transactions as a means to penetrate new markets and expand product offerings."

M&A activity is particularly strong amongst Canada's small and medium-sized enterprise (SME) demographic, where partnerships and collaborations are beneficial to the bottom line and valuable to competing on a larger scale. This activity is being fueled in part by the country's shift away from large publicly-run companies to smaller privately-owned businesses, which is itself being led by a surge of private equity capital, and the ability for private companies to finance without accessing public markets.

"It's impressive to see Canada's middle market responding to the challenges of economic competitiveness by being aggressive in terms of their M&A strategies to penetrate new markets and growth," Hatges continues. Looking ahead, he adds, "As the economy grows modestly and capital markets stagnate, private equity is expected to play a major role in the SME space and will be a contributing factor to future M&A and growth for SMEs."

"As demographics in Canada point to a greater proportion of retiring individuals, private equity has become a major liquidity option for private company shareholders monetizing their businesses."

#### **Peter Hatges**

President, Corporate Finance Inc. and National Sector Leader, Automotive, KPMG



# To the victor go the spoils

#### The race for new markets

Canada's manufacturers acknowledge the need for new markets and sectors; if not to achieve their growth objectives, but to beat their ambitious global competitors to the punch. Still, our survey suggests a disconnect between "thinking global" and taking action outside the relative comfort of North America.

Over the past two years, 71 percent of Canadians have focused their growth strategies on increasing market share within their existing geographic markets. Looking at the next two years, however, 66 percent will continue along those same lines. Moreover, while 55 percent plan to enter new geographic markets. Still, many are eyeing the United States as their prime target.

"A large majority of Canadian manufacturers continue to see the United States as their preferred export and investment destination, with very few of them planning to diversify into other markets," offers Don Matthew, National Sector Leader, Industrial Manufacturing, KPMG. "We believe that exposure to emerging markets is a priority for Canadian businesses, tapping into the huge opportunities offered by faster-growing economies."

#### Moving production



No change in operations



We have always kept operations in Canada



Add additional facilities

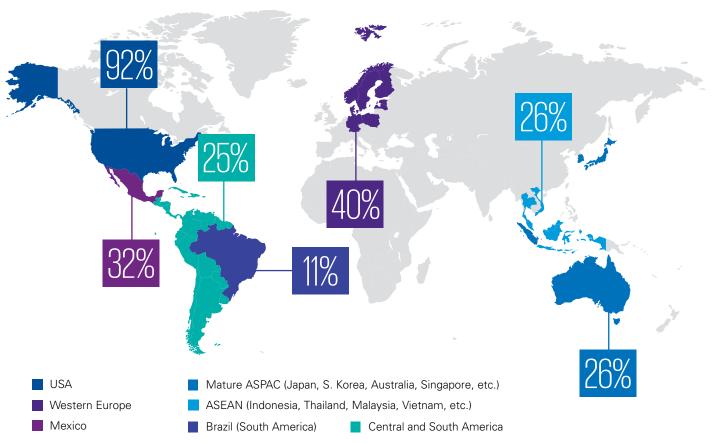


Yes, to another country (outside of Canada)



Yes, reshore back to Canada





Of the 67 percent of Canadians who currently export outside of Canada, an overwhelming majority do so to the United States, followed distantly by regions such as Western Europe (40 percent) and Mexico (32 percent).

Moreover, of the 15 percent of respondents who plan to set up operations or manufacturing facilities in other countries over the next two years, more than half plan to do so south of the border.

"Most Canadian companies who are entering new geographic markets are entering the US," agrees Bob Jolicoeur, National Industry Leader and National Sector Leader, Chemicals, Industrial Markets, KPMG, noting that while growth does not mean ignoring Canada's largest trading partner, it is worth recognizing that trade with the US and its overall impact on Canada's GDP has decreased over the last two decades. "The US is still our largest trading partner - and it will be

for the foreseeable future - but if you're going to also grow as a company you need to access emerging economies."

Those emerging markets include India and China, which cannot be ignored despite some of the political and cultural challenges to entry they may pose (e.g., regulatory, cultural, logistical, etc.).

Equal opportunities exist in Western Europe, where conditions continue to stabilize; and in Africa, which despite recent speed-bumps is poised to realize its oft-stated potential as the "next new frontier" thanks in part to Nigeria's growing oil business and the region's booming population.

The predictions fall in line with what Canadian executives and their global counterparts expect. In both cases, India, China, and the United States are viewed as the topmost regions for growth in the coming years.

#### The danger of missing out

It's no revelation that entering new markets and sectors is essential to growth. Canada's manufacturing industry produces well beyond its domestic needs, and with export dealings with the US showing a downward trend, the options are to either expand overseas or get left behind.

Adding to this is the fact that global executives are far less timid about exploring new markets. In KPMG's 2016 Global Manufacturing Outlook 92 percent plan to enter new geographic markets to drive growth, and 80 percent plan to do the same for new sectors.

Of these formidable competitors, Asia appears the most aggressive. This is especially apparent in the automotive sector, where Doug Gates, Global Sector Chair, Industrial Manufacturing and Head of Aerospace and Defense, KPMG, reports that Asian manufacturers are gearing up to give worldwide competitors a run for consumer money: "Anyone waiting for a slow down in the level of competition coming from Asia will be disappointed. Asian manufacturers clearly expect to step up their efforts to capture new market share and grow their bottom line and that will mean even stiffer competition going forward."

#### Seizing the new market edge

Pursuing new markets means having a strategy in place to navigate regional politics, understand cultural differences, and identify partners who have relationships within those desired markets and who can help overcome the obstacles to entry.

"Accessing new markets can be a huge learning curve," agrees Jolicoeur, noting, "Every relationship is built on trust and mutual respect; and, where that might be easier to do in places like the United States, which is closer, has the same language, and follows a familiar culture, it can understandably be harder in regions where those factors can't be taken for granted."

Canadian manufacturers can make a stronger play for new markets by working with advisors to identify potential issues, seek out joint venture partners, and gain insights into the nuances of the region.

After all, adds Bob Sacco, GTA Trade and Customs Practice Leader, KPMG, the risk of doing nothing while other countries make their move is clear: "Dependence on a single market leaves our economy vulnerable, particularly in a context of political uncertainty and increasing protectionist tendencies across the border."

"It is interesting to note that Canadian executives are less optimistic about growth, more concerned about currency fluctuations and spending less on R&D than their global counterparts. That they also cite business uncertainty and lack of incentives as main reasons for not planning for major near term capital investments should be a call to action for both levels of government to address the confidence levels of executives who drive the Canadian economy."

#### Flavio Volpe

President, Automotive Parts Manufacturers' Association (APMA)

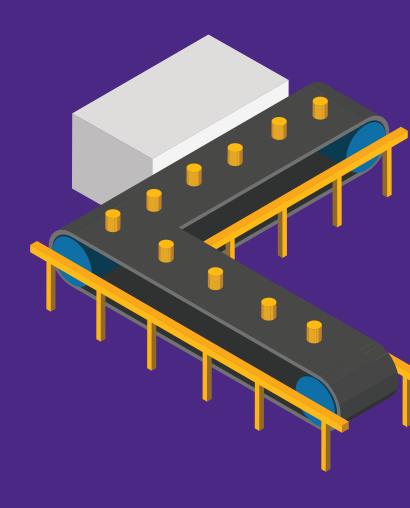
### Reluctant to re-shore

Despite predications that low oil prices would convince Canadian companies to re-shore their operations from overseas, only 2 percent of Canadian manufacturers plan to do just that. As well, with many reporting they have either never left Canada or plan to keep their operations unchanged, it's evident the industry isn't planning any major moves in or out of the country in the near future.

"Everyone says they expect to grow their market share and everyone says they plan to be aggressive in their strategies, yet there are no indications that the size of the market is going to increase dramatically over the coming years. There are going to be really fierce competitions fought over every scrap of market share available and there will certainly be winners and losers."

#### **Doug Gates**

Global Sector Chair, Industrial Manufacturing and Head of Aerospace and Defense, KPMG



# Barriers to entry

#### A call for trade and customs support

Canada's cautious approach to new markets may be a result of the borders themselves. Manufacturers tell us that excessive red tape, taxes, and other logistics weigh heavy on their willingness – or even ability – to establish trade or set up operations beyond Canada and North America.

It's only natural, then, that almost all executives support Canada's involvement in free trade agreements (FTAs), with two-thirds hoping to take advantage of said agreements to pursue new markets, and little under half are looking to FTAs to access new and cheaper suppliers, among other advantages.

"Attitudes towards free trade are largely positive among Canadian manufacturers," agrees Bob Sacco, GTA Trade and Customs Practice Leader, KPMG. "This is hardly a surprise for a trade-dependent country such as Canada, where merchandise trade accounted for 55 percent of GDP in 2015 – up from less than 30 percent\* in the early sixties. For Canadian companies, international sourcing, sales, and expansion are crucial to future growth and business leaders are increasingly seeing trade management as a competitive area that merits additional resources."

With as many as 400 agreements\* in force across the world, the FTA landscape certainly has the potential to yield significant reductions in duties and import related costs. Still, with preferential duty treatment comes additional compliance responsibilities and increased administrative burdens, including heightened requirements in regards to knowing the origin of goods.

The onus is on executives to allocate the necessary resources to identify cost saving opportunities, while ensuring their operations remain compliant in a time of increased scrutiny by customs authorities.

<sup>1\*</sup>Source: Statistics Canada, 2015, http://www5.statcan.gc.ca/cimt-cicm/

<sup>2\*</sup>Source: World Trade Organization, July 2016, https://www.wto.org/english/tratop\_e/region\_e/region\_e.htm

#### Percent of support for free trade agreements



#### **Government-level support**

Over half of manufacturing respondents believe the Canadian government has a stronger role to play in supporting global competition. 56 percent think more can be done to increase funding on research and development and lower taxes; while half want the government to conclude trade agreements and open new markets for Canadian exports.

Not surprisingly, a large percentage (44 percent) would also like to see the Canadian government step up its efforts to remove the legal, regulatory, and policy barriers to global expansions.

"Canadian manufacturers are concerned-and so are we-that excessive red tape in doing business globally will negatively impact their growth in the coming years," observes Don Matthew, National Sector Leader, Industrial Manufacturing, KPMG. "The opportunity to sell and source worldwide brings great challenges for companies engaged in global trade. In order to do business effectively, such companies need to strike a balance between ensuring timely movement of cross-border goods and complying with complex regulatory systems designed to ensure safe and verifiable cross-border transactions."

Doing this is made more challenging by the need to coordinate compliance standards, audit activities, and technology systems across multiple regulatory regimes and jurisdictions. Worth noting is that the government has implemented a number of initiatives to help Canadian manufacturers' ability to compete globally (e.g., recent consultations to consider eliminating import duties on certain agri-food processing inputs and CanExport, a government initiative launched in 2016 to enhance the competitiveness of Canadian small and medium-sized enterprise demographic (SMEs).

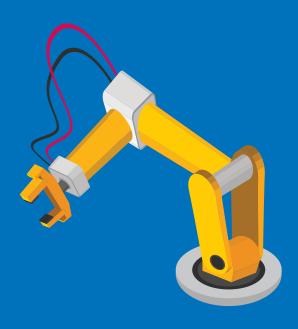
As such, companies can play a greater role in enhancing their global chances by connecting with their governing partners and exploring available options.

# Free trade agreement (FTA) uncertainty

The United States' wavering commitment to FTAs may be causing Canadians to take a "wait-and-see" approach to new market initiatives.

Moreover, developments around Brexit have complicated the Canada and European Union Comprehensive Economic and Trade Agreement (CETA) and caused uncertainty regarding when the agreement will be ratified and what the relationship between Canada and the UK will look like in a post-Brexit world. Specifically, Canadian companies that export or do business in Britain are concerned that they may have to open additional European offices and possibly downsize their British ones as trade patterns shift.

So what does it mean if the TPP doesn't go forward? What about the CETA and the current Brexit situation? Canadian manufacturers have a lot of questions which will be answered as economic and political conditions unfold.



# Bridging the innovation gap

# Investments lagging in Canadian research & development (R&D)

Investments in innovation and R&D are critical to Canada's competitiveness. And although Canadian manufacturers are on board with the need to innovate, they trail their global counterparts in financial commitments.

29 percent of Canadian respondents spent only 2–3 percent of their revenues towards innovation and R&D over the past two years; compared to 28 percent of global executives who spent 4–5 percent within the same time period.

Furthermore, while over a quarter of Canadians plan to spend between 6–10 percent on innovation and R&D within the next two years, more are again eyeing investments in the lower 2–3 percent range.

Our 2016 CEO Outlook Survey showed that Canadians appear to lag in innovation commitments. Canadian CEOs were less likely to place it in the top three priorities as compared to their global counterparts, and fewer Canadians are planning to make fostering innovation a strategic priority over the coming years.

In short, says David Regan, Partner-in-Charge, of KPMG's Tax Incentives Practice, "R&D is risky and Canadian CEOs are more risk averse than their global counterparts. This is against the backdrop that Canada has one of the most generous tax incentive programs in the world for undertaking R&D in Canada, which are designed to offset some of the risk."

#### Revenue spend on R&D/innovation\*

	Can	ıada	Global		
	Last two years	Next two years	Last two years	Next two years	
0–1%	22	14	14	1	
2–3%	29	31	21	19	
4–5%	7	7	28	28	
6–10%	23	27	17	28	
>10%	12	12	17	21	
Don't know	7	8	4	4	

#### **Tech-savvy investments**

Canadians align with global strategies (albeit at different levels of intensity) when it comes to technology investments. Of those who will invest, 55 percent of Canadians and 39 percent of global executives plan to do so primarily in advanced IT systems, followed by robotics and advanced materials.

The emphasis on advanced manufacturing and systems is strong, which is consistent with recent provincial and federal government incentives and initiatives by key Canadian universities.

"Canada's information and communications technology (ICT) sector, especially ICT jobs within the digital economy, continues to grow at a rapid pace," says Regan." This is a function of greater enrollment and graduates of Canadian universities and colleges' ICT programs, as well as greater collaboration between educational institutions and key industry players. Our universities and colleges are adapting existing ICT programs to keep pace with the speed of innovation and meet the needs of our Canadian economy."

#### Support for the taking

Canada remains one of the most tax-competitive countries in the world for business, but nearly a quarter of Canadian manufacturers are not taking advantage of the incentives available to them. Certainly, between federal and provincial R&D tax incentives (SR&ED), apprenticeship and co-op credits, IRAP, and other tax incentive programs, there exists ample support for Canadian innovation and R&D, and yet manufacturers show a lack of awareness - or even confidence in pursuing those resources.

# Keeping R&D close

Canada's lagging innovation investments can be attributed in part to the nature of the companies themselves. Today, many companies within our borders exist as an operating entity of a global multinational. Therefore, since companies traditionally prefer to keep their R&D closer to headquarters, it's arguable that investments in "Canadian innovation" do exist, but in their originating countries.

"That notion of what is a Canadian firm has changed a lot over the decades, and that's definitely had an impact on where companies invest in R&D. If Canada wants to compete, then our R&D schemes have to be demonstrably better than what's in place in the rest of the world. Otherwise, we're not going to attract that interest in R&D investing here," says Bob Masterson, President and CEO, Chemical Industry Association of Canada (CIAC).

Physical proximity to manufacturing sites can also influence investment levels. According to David Podruzny, Vice President, Business and Economics and Board Secretary, CIAC, "Successful and sustainable R&D locates next door to related manufacturing. It's possible to buy innovation and pay for it with taxpayer dollars. If you want it to be sustainable, and you want to have a located world product mandate, many large multinational companies will say that an R&D facility needs to be within one hour of its related manufacturing so you can test what you're theoretically considering."

"This is often lost in the conversation when discussing ways to incentivize R&D," Podruzny cautions, adding, "If you don't have a competitive manufacturing sector, you may not be able to have a sustainable R&D sector."

<sup>\*</sup>May not total 100% due to rounding

### Lagging tech investments

Less than half of Canadian manufacturers are planning to make major capital investments in technology over the next twelve months. Of the 45 percent who are not, top reasons include business uncertainty, lack of financing, lack of tax incentives, and unfavourable foreign exchange rates.

"It is a concern that only about half of Canadian manufacturers intend to make major investments in new technologies this year," explains Jayson Myers, President & CEO, Canadian Manufacturers & Exporters (CME). "They will be seriously lagging behind their global counterparts, especially when it comes to the adoption of advanced robotics, materials, artificial intelligence, joining, and additive manufacturing technologies. Collaboration has become a priority for R&D strategies while many Canadian manufacturers are also looking to improve their supply chain environment, particularly when it comes to demand and inventory planning and optimization."

#### Technology investment plans in the next 12-24 months

Canada						
Types of technologies	Yes, definitely					
Advanced IT system	55%					
Robotics	31%					
Advanced materials	29%					
Global						
Advanced IT system	39%					
Robotics	39%					
Advanced materials/material bonding technologies	33%					

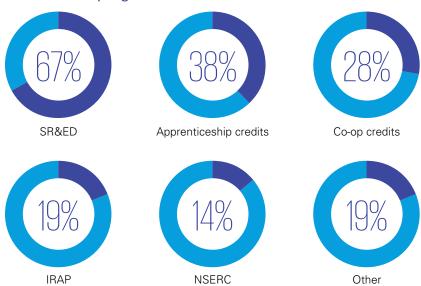
"The largest Canadian tax incentive programs are improving in their administration as the government is striving to cut red tape, but apparently this message is being lost," suggests Alex Dhanjal, Partner, Tax Incentives Practice, Technology and Media, KPMG, suggesting, "Canadian governments need to do a better job of communicating the cost/benefit of pursuing the incentive offered."

Canadians are just as leery when it comes to pursuing tax credits. 41 percent believe the process to qualify for SR&ED tax incentives has become too difficult over the past five years, citing a reduced scope of eligibility; an increased emphasis on better, more detailed documentation; and a perception that they lack the resources to apply properly.

Knowledge of Canada's R&D incentives is surely high. However, for those who have not taken advantage of these programs - or the 89 percent of respondents who have not applied to any outside of the SR&ED - there is a perception that the application processes are too onerous, the rewards too little, and the outcomes not worth their effort. Moreover, some arque changes to the SR&ED system have reduced Canada's capacity for adopting and deploying R&D developments.

Nevertheless, we believe Canada's incentive programs can offset some of the risk of innovation. Canadian manufacturers would do well to get that help, apply for those incentives, and take advantage of the funding that is available to increase their R&D spending.

#### Tax incentive programs



"The ability to collaborate with new and traditional players will be increasingly important. Disruptive business models tend to use technologies, knowledge and channel strategies from more than one sector and then combine them to create new offers, dis-intermediate, and pull in new customers. Organizations are starting to realize that they do not have the resources, capabilities, agility and risk appetite in-house to create and launch new models. Speed to market, new ideas and innovative capabilities are likely to characterize the next wave of growth but manufacturers will need to figure out how best to embrace and execute."

Dr. Nicholas Griffin Head of KPMG Global Strategy Group

# Ontario-Québec comparison:

Participation levels in Canada's SR&ED incentives differs notably among manufacturers in Ontario and Quebec. 79 percent of Ontarians are accessing SR&ED, compared to nearly half as many (40 percent) of Québecers. Interestingly, Ontario manufacturers' SR&ED participation rate is even higher than the national average (67 percent).

## Lone wolf approach

Innovation may be on the minds of Canadian manufacturers, yet few are willing to partner with third-parties in achieving their R&D breakthroughs. Little over a third are open to the idea of a strategic partnership, with the majority opting to go it alone.

"When it comes to industrial R&D conducted by the business/ enterprise sector, companies in the manufacturing space don't typically look for collaborations with third parties," says Dhanjal. "In Canada, R&D collaboration with third parties is more common in the higher education and federal government sectors than in the business/enterprise sector."

# Evolving the supply chain

#### Reaching for the next level

Supply chain management is fast becoming one of the most costly aspects of management. This is even more so in light of factors such as service provider difficulties, transportation challenges (e.g., rail closures), and the drop-off of vital services such as major trucking carriers.

As such, Canadian manufacturers believe in a need for greater and more effective supply change management to keep pace with global ebbs and flows. Currently, nearly two-thirds of Canadian manufacturers use demand planning and forecasting to improve their supply chain, and over half implement inventory planning and optimizations. Moreover, 60 percent believe they have the resources in place to manage their supply chain in today's market conditions.

"Based on KPMG's experience in working with importers and exporters, access to reliable data is a key challenge, the lack of which can frustrate long-term planning and ultimately hurt growth. But even where accurate data is available, managing and optimizing that data can be a challenge. The adoption of global trade management technologies helps companies to automate routine trade operations, allowing their trade professionals to move from lower-value to higher-value activities."

#### **Don Matthew**

National Sector Leader, Industrial Manufacturing, KPMG

#### Supply chain environment: Investment areas over the next two years









Demand planning and forecasting

Inventory planning and optimization

Building stronger relationships with other organizations

Procurement

#### Time to plan and optimize

Moving ahead, manufacturers appear to be keeping up with supply chain investments. 58 percent intend to invest in inventory planning and optimization over the next two years, 43 percent plan to invest in procurement, and 63 percent in demand planning and forecasting.

"Having demand planning and forecasting high in the list of executives for the improvement of their supply chain is an excellent thing, as it is at the source of all planning activities that the supply chain has to manage," says Jérôme Thirion, Partner, National Lead Supply Chain and Operations, KPMG. "However, they should make sure that their forecasting tools and their demand planning processes are producing good quality results. Experience shows that it is not always the case. Usually, both the statistical method for creating initial forecasts is not the best one, and the process of adding business intelligence to these statistical forecasts is not as efficient as it should be."

Investments in inventory planning and optimization are also high, which is a good thing for manufacturers as they seek

to increase service levels and reduce overall inventory. Like everything else, optimization is impossible without the right information, and of the executives who believe they do not have the adequate means to manage their supply chain, a majority say the largest gap is in data and analytics.

"It is surprising to see that executives feel that their largest problem with supply chain management lies in the lack of inventory data and analytics - especially when the tools to maintain accurate inventory information and tools to report on inventory management are standard off-the-shelf products that suit most business needs," adds Thirion. "This is an issue that should be addressed quickly as it could prevent businesses from being selected as business partners, when the customers are expecting B2B connections for accurate inventory information to be transmitted."

Finally, while manufacturers are recognizing the need for greater inventory control; this enhanced focus is making it more difficult to plan ahead. Where customer orders were typically made on a yearly basis, they now trend towards quarterly, monthly - and in some cases, weekly - orders.

"Investment in Procurement: the trend is currently very strong. Procurement becomes more and more a strategic partner, and this shows through the creation of CPO positions (Chief Procurement Officer). Companies invest, depending on their procurement maturity level, on building a Procurement organization with skilled people, on building a strong and centrally controlled process, and/or on the automation of the S2P (Source to Pay) or the P2P (Procure to Pay) process."

#### Jérôme Thirion

Partner, National Lead Supply Chain and Operations, KPMG

# Executive summary: Key findings

Canadian manufacturers are ready to make their move, but time is not on their side. With global competitors pursuing growth with faster and more aggressive strategies, the opportunities won't last forever.

It's clear that Canadians are eager to grow beyond their borders. It's also clear they must make their moves sooner, rather than later. This is evident throughout our survey and highlighted by our key findings:





### Canadians are still cautious

Although Canadian manufacturers are forecasting moderate growth for their companies and industries, their confidence in the Canadian and global economy is lacking. This stems from lingering anxieties over the economic downturn, a perceived lack of support from their governments, and an intrinsic desire to stay close to home.

These attitudes are the cause of Canadians' mild levels of investment in innovation and research and development (R&D), and new market strategies - putting them at a disadvantage when it comes to competing against other countries.



## Notable differences exist between Ontario and Ouébec

These neighbouring provinces differ when it comes to identifying business risks, external influences, and opinions on the role of government. As well, Ontarians are employing more strategies to enhance their supply chain management.



# Economic uncertainty is holding us back

Nearly half of Canadian manufacturers see economic growth, currency fluctuations, and pricing pressures as the top external factors that will impact their growth over the next three years. Meanwhile, an economic downturn, new entrants or technologies, and the volatility of foreign exchange rates top the list of perceived business risks.



## Growth is a top priority

Growth is a core focus over the next two years for half of our survey respondents. Two-thirds say they will push for increased market share in their existing geographical markets and sectors, while little over half will enter new geographic markets (albeit, primarily the US). Once again, this speaks to a cautious approach, but one that shows at least somewhat of a desire to step outside Canada's borders.



# The US is still our preferred partner

Most Canadian manufacturers still export primarily to the United States. A majority also have no plans of setting up shop outside Canada's borders; and of those who do, over half are looking to set up operations in the US, followed at a distance by Western Europe, China, and Africa.



### 🕌 🛮 A lower dollar preference

Canadians prefer a sub-US\$0.80-cent dollar, with over a third favouring the dollar below 75 cents. Looking ahead, a majority of executives predict the Canadian dollar will remain below 80 cents for the next six months to two years.



## Free trade support

An overwhelming majority of manufacturers support Canada's involvement in free trade agreements and the open borders they facilitate. However, they are worried that Brexit and US politics might muddy the free trade waters, impacting conditions for cross-border business.



# R&D investments are on the rise (but is it enough?)

Compared to previous years, Canadian manufacturers are more willing to invest in research and development (R&D). Nearly a third have already spent between 2-3 percent of revenues on R&D over the last few years. While these R&D investments are less than their global counterparts who have spent 4-5 percent of revenue, it indicates an increased desire to pursue innovation and explore new products and services.



### A tax incentive disconnect

78 percent of Canadian manufacturers are taking advantage of the government's SR&ED tax incentive program, but few only one-in-ten are exploring one of the many alternatives (e.g., apprenticeship credits, co-op credits, IRAP, etc.). 88 percent of those who haven't used SR&ED still believe they would not receive it or that the process is too cumbersome. This speaks to a need for even greater awareness for government tax incentives and the options beyond SR&ED.



### Tepid technology investments

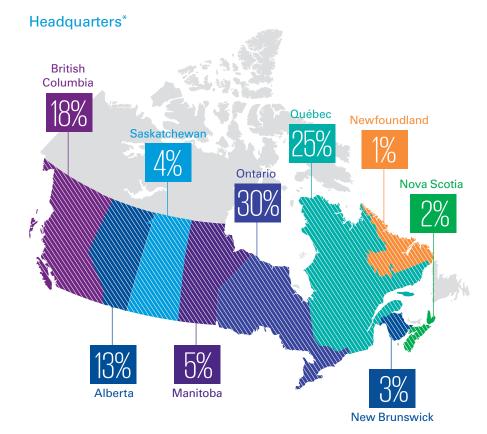
Whether due to economic concerns or overall risk aversion, little over half of respondents are willing to invest in new technologies. Of those who are, prime areas of focus appear to be investments in advanced IT systems, robotics, and advanced materials.



# About the Survey

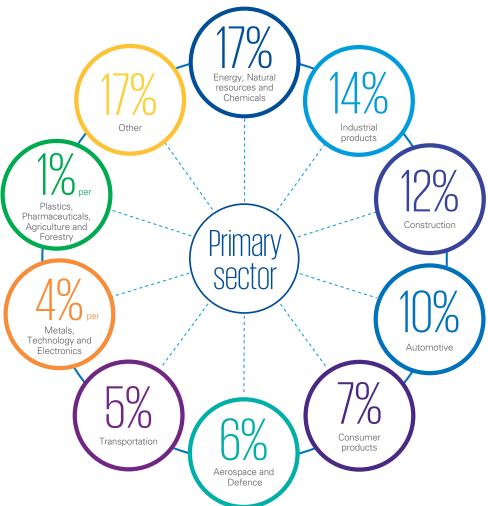
KPMG's Canadian Manufacturing Outlook 2016 is the largest report to date, incorporating survey responses from 223 Canadian manufacturing executives (360 respondents to KPMG's 2016 Global Manufacturing Outlook). Among them are insights from company CFOs, treasurers, and controllers, who comprise 37 percent of respondents; as well as manufacturing CEOs and president (35 percent), and other industry executives (28 percent) – a majority of which define their main role as being connected to either the financial or general management side of their operations.

2016's outlook also captures perspectives from companies throughout the country, with almost two-thirds reporting annual revenues of less than \$50 million.



<sup>\*</sup>May not total 100% due to rounding

#### Respondent profile



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