



opportune moment to ask important questions about the future.

Maturity levels of LPs in Canada differ drastically, with few operating like a developed organization while the rest are nascent start-ups with the technical capabilities, but operationally underdeveloped. The ability to scale production to meet anticipated demand remains a challenge. LPs struggle to raise capital to support the cost of increased production and enhanced operations, without compromising margins and/or compliance with regulatory standards. And, given the current regulatory uncertainty, the amount of investment Canadian LPs are willing to make now varies.

The scalability of business models varies as well. Some are owned and operated by founders who understand the technology, crop yields and quality, but are not as strong on how to operate a thriving business. Others have the right operating model for growth, are responsive to government regulations and are investing to scale the business up. These differences present a challenge in itself, since the maturity level of the business affects its ability to capitalize on opportunities to scale and drive growth.

LPs will have to be able to compete with other established adjacent industries – such as tobacco, pharmaceuticals, alcohol and consumer products – which are likely to have an interest in entering the market for recreational cannabis. These companies have strong ties to capital, possess mature infrastructure, brand recognition and the knowledge of operating in a highly regulated environment. Despite the regulatory restrictions, consumers will eventually dictate how, when and what they want, as they have with other competing industries.

Most LPs are highly entrepreneurial, which is to be expected, but they will need to quickly organize talent and apply the formality, rigour and a lens for governance that established organizations do.

About this report

EY conducted a national study of the Canadian cannabis sector to determine how well existing licensed producers are prepared to support the cannabis industry post-legalization. We interviewed senior executives and a board member from 11 LPs with varying size, scale, revenue and value chain activities, and also sought insights of a government representative. Our report presents what they had to say on market predictions, consumer demand, operations management, governance and innovation.



Current state of the industry

Canada is on the verge of legalizing cannabis.

On 13 April 2017, the federal government released the proposed Cannabis Act (Bill C-45) to legalize the production, distribution and sale of cannabis for recreational purposes. The target launch for the bill to become law is 1 July 2018, subject to parliamentary approval. If passed, cannabis use for recreational purposes will be legalized but subject to strict regulatory oversight.

Canada is the first of the G20 countries to fully legalize cannabis for recreational consumption and open up sale and distribution to both domestic and international markets. This is an unprecedented opportunity for the country to be the global leader in the cannabis space, to shape the regulatory framework for cannabis around the world and to spur innovation and economic productivity.

However, the industry is facing the following challenges:

Unclear regulatory environment

The cannabis sector in Canada currently operates in many unknowns. It is unclear how quickly legislation will be implemented and enforced, and how the differences in provincial regulatory environments will affect competition in a post-legalization world. How the industry defines itself is just as important as how cannabis companies and their affiliates will eventually operate and explore investment opportunities in the future.

Capacity crunch

A slow licence approval process affecting the ability to raise capital and cultivate in time for legalization has raised concerns about whether LPs and affiliated companies can meet product demand. The medical market alone is expected to reach 500,000 patients by 2021, which means a projected demand of 150,000 kg of cannabis flower.² The industry has the potential to start scaling up and minimize the predicted supply shortage.

In light of the above challenges, strategies to remain successful may include:

- Determining the need for specializing in differentiated product or service offerings
- Adapting the business to take advantage of international opportunities
- Deploying an efficient operating model to achieve competitive margins
- Recruiting and retaining talent with the desired competencies

¹ "Canada takes action to legalize and strictly regulate cannabis," Health Canada news release, 13 April 2017. https://www.canada.ca/en/health-canada/news/2017/04/canada_takes_actiontolegalizeandstrictlyregulatecannabis.html

² "Happy Cannabis Day? Marijuana industry scrambles in countdown to 2018 recreational opening," *Financial Post*, 30 June 2017. http://business.financialpost.com/commodities/agriculture/happy-cannabis-day-marijuana-industry-scrambles-in-countdown-to-2018-recreational-opening



What the cannabis industry leaders are saying

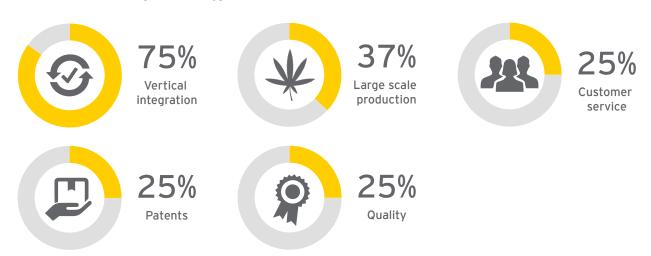
In our discussions with LPs, we identified five key themes that provide opportunities for the cannabis industry. Here's what we heard from market participants.

Strategy and operations

The overall strategy for companies in the cannabis sector is conducive to obtaining capital and effectively allocating resources to support growth targets and operational priorities. Many executive leaders alluded to the importance of effectively managing their company's strategy to differentiate their offerings, achieve economies of scale and create a competitive advantage to mitigate the downward price pressures of commoditizing cannabis flower. They also understand the importance of maintaining a stable supply chain to meet demand in both the recreational and medical markets, and capitalizing on the many domestic and international opportunities.

Most respondents described the importance of branding, yet admittedly cannot fully develop their marketing strategies at the time of this study. Their current focus is on operations and scaling up capacity and production to meet the predicted demand post-legalization. Vertical integration has already occurred with some LPs, similar to more established industries, such as tobacco, pharmaceuticals and consumer packaged goods. But, many deem that it can be more advantageous to specialize and build competencies in fewer areas, focus on allocating resources and targeting investments.

What is the focus of your strategy?





Technology and innovation

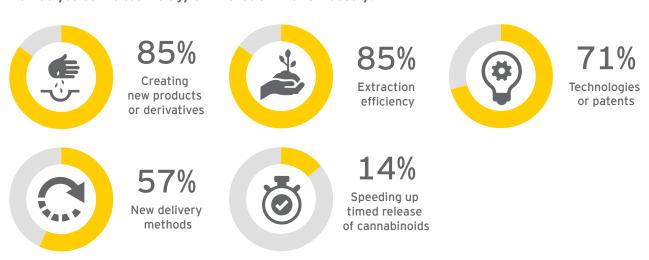
Technology is often the major driving force behind the transformation of an industry and directly influences both the value a company creates and the pace at which a company grows. This is evident in other industries, where technology and/or innovation is forcing companies to redefine their operating models.

While the definition of "technology" and "innovation" differed among respondents, many recognized that developing or implementing innovative technologies effectively can lead to lower cost of production, higher yield, productivity enhancements, heightened product quality and improved extraction methods.

Respondents identified three primary areas of their businesses where technological improvements and innovation would be crucial to maintaining competitiveness in the cannabis industry at both the product and process levels:

- 1. Improvements and standardization of cultivation practices to increase and stabilize yield, ultimately contributing to achieving economies of scale in cultivation and processing
- 2. Improvements in the effectiveness of extraction technologies to increase quality and efficiency and reduce waste
- 3. Innovations that contribute to increasing the variety of delivery methods and speeding up the activation and metabolism of cannabinoids in the human body

How do you define technology or innovation in this industry?



Investment strategies

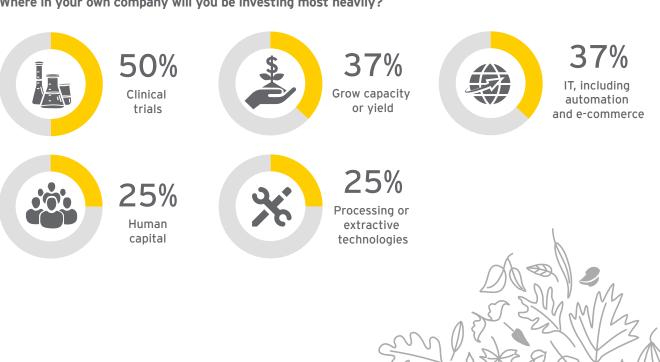
Depending on their relative size and maturity, companies in the cannabis industry have different priorities and, as a result, are investing in different areas of the business.

Many LPs indicated that capital is mostly being allocated towards building industrial grow facilities to ramp up capacity to meet the expected demand for cannabis. Uncertainty in the regulatory environment is impeding their ability to make long term strategic investments.

Investment in talent is also admittedly lacking. Many realize that the composition of talent in areas of the recreational business - including retail, if permitted, corporate compliance, governance and branding – is not currently a focus but will need to be in order to operate competitively. A war on talent is expected to intensify.

Additionally, the right investment in technology and innovation can provide a competitive advantage and allow for differentiation in the market. Companies will be able to charge a premium price, if permitted by the government, for an innovative product or reduce the cost of production, thus effectively managing their margins.

Where in your own company will you be investing most heavily?



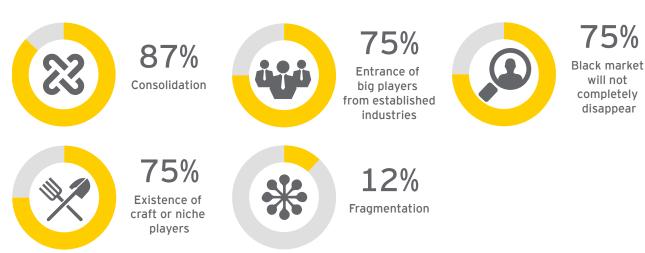
Consolidation and competition

The two highest barriers to entry into the cannabis sector that respondents identified were access to capital, as banks are not currently issuing traditional financial instruments to cannabis companies, and the speed at which the government is issuing licences to cultivate and distribute cannabis.

Many believe that consolidation is inevitable, leaving a few large players post-legalization. Most respondents do not believe that the black market will disappear completely at the onset of legalization. The extent to which the black market products will be eradicated will depend largely on government regulation. Specifically, the level of taxes imposed on cannabis, retail price of the product, accessibility and ease of purchase will dictate the size of and demand for black market goods.

Recognizing that there is substantial opportunity in the cannabis industry, established industries such as tobacco, pharmaceuticals and alcohol are expected to enter this space and try to leverage existing competencies and assets. Cannabis companies are very aware that established industries are well-positioned to enter the market.

What will the composition of competition in the Canadian market look like in three years?





Customers and stakeholders

Companies recognize that deep-rooted customs and traditions in more conservative cultures will be difficult barriers to overcome.

Despite this, there is an opportunity to convert both a segment of consumers who might consume cannabis and derivative products for recreational purposes and a those who might turn to cannabis and derivatives for medical applications. The rate and percentage of conversion is predicted to be largely dependent on the de-stigmatization of cannabis and public education. The key driver respondents identified for greater market acceptance was the need for credible and objective scientific research to educate the public on the benefits and risks of consuming cannabis.

Respondents recognize that purchasing cannabis and derivative products is still largely experiential, as consumers like to see, touch, feel, smell and learn about the product that they are buying. Most respondents were unsure about future distribution channels and access points for cannabis. It is a widely held belief that much like other more established industries, consumer demand and sentiments will dictate the type of derivative products, consumption methods and omni-channel interactions consumers will have with cannabis and derivative products.

50%

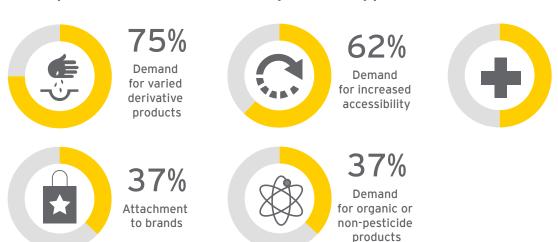
Demand

for medical

and safety

education

How do you see customer behaviours shifting in the coming years?





What does the future look like?

Much of the regulation around retailing, consumption, marketing and developing derivative cannabis products is unclear, and will vary on a provincial basis.

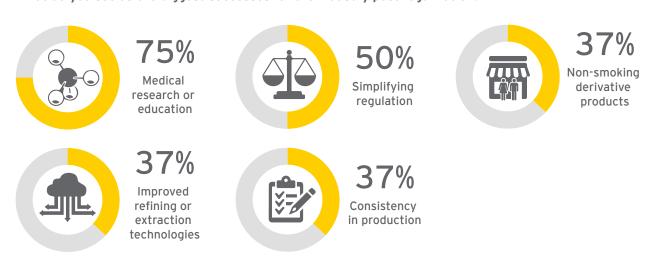
On 1 November 2017, the Ontario Government announced that it would be launching cannabis retail stores under the Ontario Cannabis Retail Corporation banner, overseen by the Liquor Control Board of Ontario (LCBO),³ in an attempt to eradicate the presence of current illegal privately run dispensaries. Companies that focused their strategies on downstream brick and mortar retail in Ontario will be pushed out of the market and cannabis sales will be monopolized by the provincial government. There is a consensus among companies in the cannabis space that the sooner provincial governments roll out their regulatory frameworks, the easier it will be for them to make strategic longer term investments.

The majority of respondents believe that the cannabis industry will continue to consolidate. Inorganic growth is expected to persist, leaving a few large players.

They indicated that there would be a supply shortage in the first three years post-legalization as companies try to meet domestic and international demand. Primary methods of consumption and places of use are also expected to shift as cannabis and hemp become increasingly de-stigmatized and more research is conducted.

With comprehensive legislation, Canada could be the world leader in the cannabis industry and therefore instrumental in shaping regulatory frameworks for cannabis and hemp legalization around the world.

What do you see as the biggest successes for the industry post-legalization?



³ New provincial corporation will control weed sales and close illegal dispensaries," Toronto Star, 1 November 2017. https://www.thestar. com/news/queenspark/2017/11/01/tory-says-provincial-marijuana-law-should-give-city-tools-to-close-illegal-weed-dispensaries.html

Q&A

Bruce Linton, Founder, Canopy Growth Corp.

Bruce Linton is the founder of Canopy Growth Corp., Canada's largest cannabis producer. Like his competitors, Bruce is busy positioning his company in what is likely to be a highly competitive market. Canopy has raised more than \$150 million in capital to date. We caught up with Bruce to talk about the coming legalization of cannabis for recreational use and get his thoughts on everything from competition and provincial distribution plans to hiring for growth.



The industry today is a crowded one. Who will succeed?

I believe the vast majority of participants in this market have a limited interest in actually creating a proper and sustained business. Principally, they are here because there's no money left to be made promoting gold or oil. Only a handful are intending to be successful, long-term companies.

So, what will the industry look like after the dust has settled?

In this business you need a 125,000- to 150,000-square foot production facility at the absolute minimum, or you're an entrepreneur running a craft producer. So, over the long term, I see an industry with two or three major, relevant players and bunch of craft producers.

How has Canopy prepared itself for the recreational market?

We got to work the day after the Liberals won the 2015 federal election. We started framing things out around total base supply, total oil extraction, branding, distribution and implementing enterprise resource planning systems that would integrate to various provincial platforms. We've been under continuous operational review for the past two years.

What has been your biggest challenge so far?

The biggest challenge by far is the uncertainty posed by the provinces. They are a new actor and they have been under no obligation to disclose their distribution plans. The result is we had to spend a lot of time designing systems for maximum flexibility, which makes them more complicated.

What is your reaction to the distribution plans you've seen so far?

We've always believed – and so far, it's turned out to be true – that distribution east of Alberta was going to be controlled by the entities that already control the distribution of spirits.

West of Alberta I suspect we will see a very slow, very different evolution, especially given that British Columbia is the principal generator of most of the illegal product and has the most dispensaries.

What is your take on the predicted supply shortage that will hit the industry post-legalization?

I think the shortage story is overstated. This all started when the Parliamentary Budget Office indicated we need 700,000 kg of cannabis to displace the black market, estimated at \$7 billion with an average price of around \$10 a gram. At the same time, what we're permitted to make on day one will represent at most half the current black market products. We don't currently have the right to make things like vaporizable concentrate products, edible products or infused products. So, at the outset, as an industry, we'll be allowed to make around 300,000 kg. But Canopy's platform alone can produce a third or more of that. The idea that there's an industry production shortage looming makes for a fun story, but it's not well thought out.

How long do you expect the black market to remain viable?

Frankly, buying cannabis from criminal sources is like buying moonshine or meat from an unsupervised processor. People don't yet understand that illegal product often has contaminants like fecal coliform, produced by operators who don't follow regulatory standards on things as basic as hand washing. So I think people are going to migrate from dirty old product to normalized product pretty quickly.

Part of the transition to recreational sales is a big shift in hiring and focus - has Canopy achieved this?

We have. But those investments mean we can't be profitable in the current period. You're spending four times as much as you would normally in order to be ready for a year from now. And we've been doing that for quite some time.

This interview has been edited and condensed.



Key considerations for licensed producers

Given current resources and business models, only a handful of LPs are expected to thrive post-legalization.

To be a successful, long-term player in this sector, unlike any other industry, these companies will need to accelerate their operations and progression through a typical business lifecycle. This includes addressing the following:

- Hiring talent outside just the pool of agricultural expertise
- Achieving differentiation in a market where the downstream product will likely become a commodity
- Maintaining a dynamic operating model as the industry better defines itself
- Establishing a clear definition of risk management that goes beyond the quality and security of the product
- Creating brand awareness in the marketplace
- Investing in technologies to enhance yield and/or quality
- Developing an effective tax structure
- Investing in the right partnerships
- Developing a cost structure to maintain desirable margins

Raising capital is fundamental to supporting the above attributes and scaling up the business for sustainable growth in this new industry. It's worth noting that companies listed on Canadian exchanges, the Toronto Stock Exchange (TSX) and the Toronto Stock Exchange Ventures (TSX-V), are not permitted to engage in any activity related to the US marijuana market, where cannabis is illegal under federal laws.⁴

Questions LPs should be asking

As market participants explore opportunities to grow and mature their business, these are the questions they should be asking:

- How should our company continue to develop its target operating model to align with organizational strategy?
- Which key channels will emerge for the distribution and retail of cannabis and derivative products?
- How should our company optimize omni-channel interactions with consumers?
- How can we proactively recruit talent and employ diverse skills as we mature?
- How should we prioritize re-investment in our strategy with increased access to capital?
- How can we restructure our operations to minimize tax implications on our business while ensuring we meet our tax obligations?
- How will our company differentiate its brand, customer experience, product quality and technology to gain a competitive advantage?
- What are the proper governance frameworks we can implement to mitigate risk and ensure compliance?
- How do we optimize our costs and achieve desirable margins?

Despite the unknowns of the industry, there are opportunities for LPs and affiliated companies. As the industry matures, consolidation is likely to occur and the type of competitors and adjacent industries will also shift. Each phase of a company's lifecycle can be conquered with finesse if they have the right talent, decision-making, commitment and partnerships.

^{4 &}quot;TSX, TSX-V and CSA clarify their positions on listed entities with ties to US marijuana market," Aird Berlis, 26 October 2017. http://www.airdberlis.com/insights/publications/publication/tsx-tsx-v-and-csa-clarify-their-positions-on-listed-entities-with-ties-to-u.s.-marijuana-market

Contact us

EY's multidisciplinary team of audit, advisory, tax and transaction professionals can assist LPs and affiliated companies as they progress through their maturity lifecycle and prepare for post-legalization

To learn more about how we can help your company grow, please contact one of our professionals below.



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