

# CANNABIS SERIES BUNDLE PLUS INNOVATION Q&A

2018 EDITIONS (Published February, June and July 2018)

Each more than 70 pages, with extensive text analysis, graphs, charts and tables



**T**his three report set produced in cooperation between Beverage Marketing Corporation and emerging trends innovation experts, HVCK, analyzes the cannabis market and sets the stage for innovative companies - particularly those in the food and beverage industry - to capitalize on the legalization of marijuana. The reports offer insightful analysis, recommendations and a well-rounded understanding of market implications of the unprecedented disruption posed by the prospect of marijuana legalization.

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## THESE CANNABIS REPORTS FEATURE

**Marijuana Legalization:** clearly a market disruptor. This 3-report set analyzes opportunities for the food & beverage industries to capitalize via cannabis innovation, explores supply chain symbiosis between the beverage and cannabis markets, discusses the role blockchain technology will play and looks at the parallels between the alcohol beverage and cannabis markets. They also offer the beverage industry paradigm as a model for overcoming challenges to reinventing marijuana to develop sustainable, mainstream cannabis products in the food and beverage sector.

This three report set produced in cooperation between Beverage Marketing Corporation and emerging trends innovation experts, HVCK, analyzes the cannabis market and sets the stage for innovative companies - particularly those in the food and beverage industry - to capitalize on the legalization of marijuana. The reports offer insightful analysis, recommendations and a well-rounded understanding of market implications of the unprecedented disruption posed by the prospect of marijuana legalization. Count on practical guidance on innovative product potential, tips for taking advantage of supply chain synergies and discussions on how alcohol beverage companies can use experience gained through historical market challenges to get a leg up in minimizing threats and maximizing opportunities.

The three-part report set, begins with "How Cannabis is Disrupting the Food and Beverage Industry", delves deeper with "The Supply Chain Symbiosis: Why the Beverage Industry's Missing Link in the Cannabis Revolution" and finally, drives home the actionable beverage industry insights with "Cannabis is the New Alcohol: Reinventing Cannabis for Sustainable Mainstream Use" These complementary reports provide the well-rounded market view, analysis and recommendations food and beverage marketers, cannabis entrepreneurs, on- and off-premise marketers, e-commerce retailers, wholesale distributors and investors need to be ready as this game changing phenomenon unfolds.

This three-report set:

- analyzes the opportunities, threats and market disruption marijuana legalization represents;
- looks at its impact on the food and beverage markets;
- assesses market potential;
- recommends specific action for capitalizing on opportunities;
- looks at the supply chain synergies that make cannabis an interesting play for food and beverage marketers, suppliers and distributors;
- addresses cannabis packaging and branding;
- explores the role blockchain technology will play in the e-commerce distribution of cannabis based products;
- speaks with cannabis industry entrepreneurs, getting their take on what's happening and what's coming next;
- makes recommendations for market entry and development of sustainable mainstream products;
- discusses product education issues;
- sheds light on dosing issues and discusses low-dose product opportunities;
- discusses product and market entry opportunities in recreational, wellness and functional food and beverage products;
- analyzes the similar challenges the alcohol and cannabis industries face, giving alcohol companies a head-start in capitalizing on this opportunity as well as recognizing and overcoming threats.

*Take your cannabis market insight to the next level.* Get the dialogue going with a one hour Innovation Q&A with Beverage Marketing Corporation and Emerging Trends Innovation Experts HVCK. Use your conference call to get the latest perspective, dive deeper into issues, discuss your questions and brainstorm with HVCK and BMC on the implications of the cannabis revolution for the food and beverage industry. Come away with actionable ideas for positioning your company to take advantage of unprecedented opportunities and avoid possible threats. This one hour session is only available with purchase of the 3 report set.

**How it works:** When you place your order, each report in the 3-report Cannabis Revolution set will be sent to you as soon as it is available via email, or immediate download if currently available. Separately, you will also be contacted by Charlene Harvey of BMC to discuss the scheduling of your Innovation Q&A call. You may request that your session be scheduled as soon as possible or if you prefer, you may wait until you've had the opportunity to digest the content of all three reports. It's up to you! The actual date and time of your one-hour Innovation Q&A Session will be scheduled at a time that is mutually agreeable to all parties. The call will take place via a conference call bridge that will be supplied to you.



# THE CANNABIS REVOLUTION

HOW CANNABIS IS DISRUPTING THE  
FOOD AND BEVERAGE INDUSTRY

A  
HVCK  
INNOVATION  
REPORT

January 2018

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# ABSTRACT

This report takes a broad view of innovation opportunities inside the larger cannabis industry, specifically as it relates to food and beverage companies. Much of the research commonly available is either too macro to be actionable or extremely investment-focused. This report aims to surface innovation opportunities derived from a broad range of content sources, viewpoints and industry insider interviews.

As cannabis becomes increasingly legal medically and recreationally, public perception and use habits are shifting faster than established companies are innovating. The consumer appetite for consistent, reliable cannabis products is not currently being met, particularly in the food and beverage space — presenting a huge opportunity for food and beverage companies as they contemplate how to enter this market. In recreationally legal markets, cannabis products are already competing with alcoholic and non-alcoholic beverages, as well as wellness and pharmaceutical products. Incumbents who aren't paying attention to this cultural and political reality are at risk of becoming the industry's next Blockbuster or Blackberry.

As this report demonstrates, the economic opportunity is massive. With the industry expected to grow to \$██████ in 2018, the time to invest, develop products, and establish a notable offering in the cannabis industry is now — and any company looking to “wait and see” for several years, will find itself behind the curve.

What to expect in the report:

- Key opportunities for the beverage and food industry in the cannabis space
- 4 original, exclusive interviews with emerging cannabis industry companies and leaders, including their tips, challenges, and lessons learned
- National and state-specific stats and projections, as well as industry- and niche-specific data
- 77 pages, including 25 original infographics and highly visualized content
- Expert analysis and predictions on what to expect in both the short and long-term, recommendations on how to prepare for these changes and invest in innovative initiatives, as well as suggested entry points for established food and beverage companies



High-level conclusions:

- Smokeables on the decline
- Female and elderly consumers on the rise
- Wellness space growing and ripe for development
- A demand for reliable low-dose consumables
- Huge opportunity for RTD beverages
- Users growing exponentially in states as they legalize
- Canadian market an ideal test market
- Reimagining the cannabis retail space and its marketing messaging will significantly expand the user base
- Immature supply chain logistics are holding back the cannabis industry — and food and beverage companies are well-equipped to fill that gap

This report explains each of these findings and makes actionable, industry-specific recommendations related to each.

# BEVERAGES

Cannabis was previously only fat soluble, but thanks to innovation from food scientists, it is now "water compatible," and appears water soluble to the consumer, opening up a huge, new cannabis beverage opportunity.



## PEARL2O \$30

Mineral water that doesn't smell or taste like pot. The water can be frozen into ice cubes, blended into a smoothie, and it can even be boiled while retaining the active THC and cannabinoids (CBD). Infused with 50 milligrams of THC and 50 milligrams of CBD.



## KIND WATER \$7

Includes terpenes, compounds which give cannabis its variety of distinctive aromas and flavors. Certain terpenes also offer a range of health benefits such as limonene, which is antibacterial and anti-fungal.



## STILLWATER BRANDS \$18-24

Tea, coffee, and dissolvable THC. The THC is tasteless. Focus on micro-dosers (10 mg at a time instead of 100 mg). Can add to any food or beverage.



## CBD FUSION WATER \$149 24-pack

Vitamin-infused CBD water that emulates the hydrologic cycle.



## CANNA NANO WATER \$10

CBD water that emulates the hydrologic cycle.



## CBD LIVING WATER \$8

Uses nanotechnology to size CBD and nutrients into tiny particles and infuses them into water for max hydration, absorption, and wellness



# WHAT'S DRIVING THE SWITCH FROM ALCOHOL TO CANNABIS?



## SAFETY

Fear of impaired decisions and actions when using alcohol



## COST

Alcohol costs more than high quality cannabis



## HEALTH

Dislike of hangovers; participants report feeling healthier after using cannabis than after drinking

## CANNABIS-INFUSED ALCOHOL?

Mixing substances is considered dangerous (just recall the issues that exploded around Four Loko, the malt liquor based, caffeinated alcoholic energy drink). But CBD, which is a mood-enhancer with health benefits, without the psychoactive properties of THC, is a viable option for cannabis/alcohol infusions.

### THE MARIJUANA + HOPS EXAMPLE

Marijuana and beer hops have a similar taste, smell, and appearance. This is due in large part to their common terpenes, the compounds that give both marijuana and hops their unique smell. Thus, it is conceivable to successfully integrate marijuana into beer brewing.

---

**HVCK PREDICTION:** [REDACTED]

**OPPORTUNITY #1:** [REDACTED]

**OPPORTUNITY #2:** [REDACTED]

# MARIJUANA AND THE PHARMACEUTICAL INDUSTRY



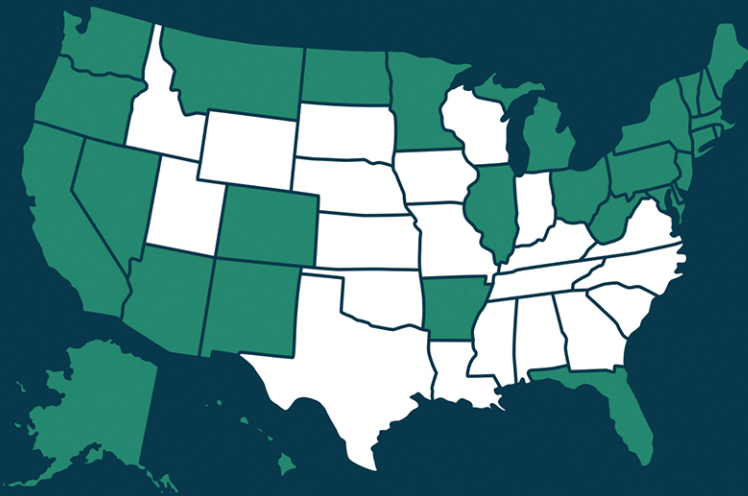
Adults suffering from chronic pain



Americans addicted to prescription painkillers



in Medicare spent on opioids



Medically legal cannabis



Reduction in daily opioid doses prescribed in states with a medical cannabis law



Fewer opioid overdose deaths in medical cannabis states

Analysis shows dollars spent on over-the-counter medications are being lost as adult use cannabis markets swell





# CULTIVATION & AGRICULTURE

While the average consumer likely assumes that all marijuana plants are created equal, there are actually several hundred different strains of the marijuana plant, all with their own unique properties, potencies, aromas, environment preferences and growing cycles.



Marijuana strain patents are big business, and big players are operating in the shadows, working to patent strains and create an IP barrier to block new players from entering the market.

**OPPORTUNITY:** Depending on the product end-use, strain selection can be optimized to produce specific properties of the end product, such as THC and CBD concentration. Coordination between the cultivator and product manufacturer can contribute to a highly optimized supply chain operation.

"With \$1.27 billion in sales in 2016, Washington state's cannabis crop now represents the second most valuable farmed commodity in that state, behind only apples—and ahead of milk, potatoes, and wheat." - *Leafly*

Traditionally, most marijuana has been grown outdoors or in greenhouses, but with several key innovations in technology, there is a rapid shift to indoor growing. At the same time, wholesale prices for indoor grown marijuana continue to be amongst the highest in the industry, compared to outdoor and greenhouse grown.

If that weren't complicated enough, the local counties and cities within each of these states each has their own regulatory frameworks and tax rules that businesses must adhere to.

And finally, given the outcome of the 2016 presidential election, the progress made in the decriminalization and states' rights deferment via the states rights focused "Cole Memo" is increasingly in jeopardy. The previous administration voiced in clear terms that they would not be pursuing organizations in the marijuana industry, provided they adhere to their state and local regulations. The current administration, and the sitting Attorney General, have not outright voiced the same level of support, casting a shadow of uncertainty over the industry.

**OPPORTUNITY:** While near-term entry into the marijuana industry is indeed fraught with peril, the long-term outlook is promising enough that even more legally conservative organizations can employ a market entry strategy to avoid being left behind.

[REDACTED]

Even if there is little-to-no capital contribution being made,

## LITIGATION RISK

Companies exploring the marijuana space often hear of the dramatized adventures of first-time users and those unfamiliar with product dosing, and immediately begin to consider the litigation exposure that might accompany entry into the space. And while these experiences are unpleasant, they are not typical for users with basic education of the product — and certainly not more litigious than alcohol-related incidents.

forging solid partnerships and providing in-kind support can help create a solid launchpad for future market entry efforts.

[REDACTED]



**Justin Singer**  
CEO, Stillwater Brands

Stillwater is a Colorado-based producer of water-soluble cannabis and cannabis beverages.

**STILLWATER**  
BRANDS



**Q: Who is your target demographic?**

We target seniors and responsible adults, and that is the bulk of our market. Millennials are being targeted with smokable products. Our customers don't use our products to get stoned.

**Q: Tell me a bit about your senior outreach program. How has it been received? Have you seen an uptick in sales to that demographic?**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

# SUPPLY CHAIN SYMBIOSIS

Why the Beverage Industry and Blockchain  
Are the Missing Link in the Cannabis Revolution

APRIL 2018

A  
BEVERAGE  
MARKETING  
CORPORATION + HVCK  
INNOVATION REPORT

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# ABSTRACT

Cannabis is projected to be an over \$5 billion industry by 2019 in California alone; the beer industry in California was \$5 billion in 2017. The magnitude of the shift that is already underway will radically transform what is consumed and how — as well as who profits from it. And supply chain logistics are at its core. (Source: BDS Analytics, IBIS World)

Cannabis supply chain regulations differ greatly from state to state, but one thing is certain: the companies that control the supply chain control the industry. After regulatory issues, distribution is the number one challenge for cannabis companies — but it is a core competency for the food and beverage industry, presenting a logical and profitable entry point into cannabis for food and beverage companies.

This new report dives into the details of how the cannabis industry is tackling its regulatory and distribution challenges, what role technology and possibly blockchain will play in that process, and how food and beverage companies can stake their claim in the cannabis industry by leveraging their supply chain expertise.



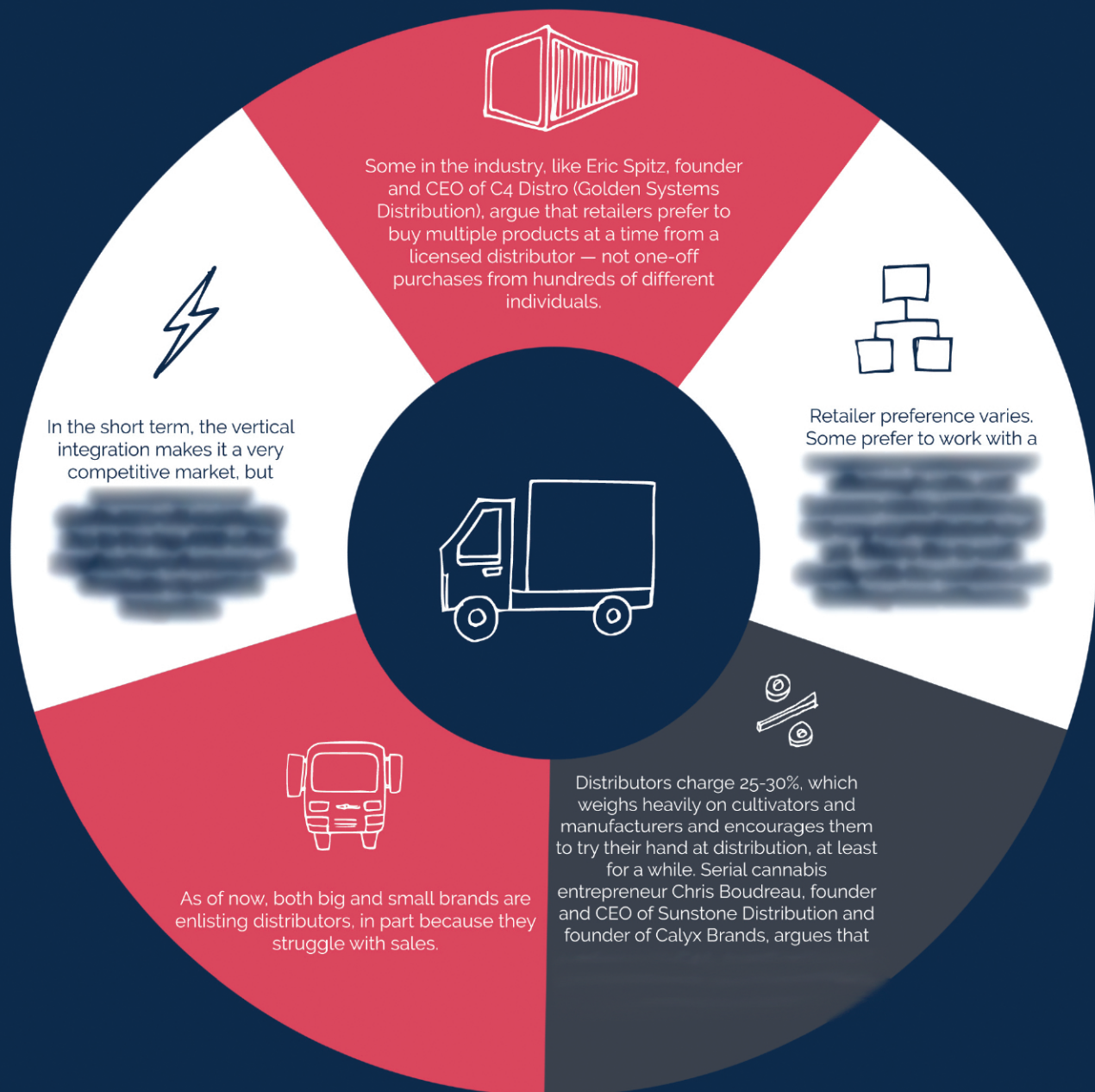
The report includes:

- Originally designed infographics
- Historical timeline of supply chain-related regulations
- State-specific histories and regulations
- Comparative breakdown of the food and beverage industry supply chain versus the cannabis supply chain
- Cannabis as a monopoly business
- Importance of vertical integration
- Distributors and vertically integrated companies to watch
- Cannabis supply chain challenges
- Opportunities for food and beverage + cannabis supply chain collaboration
- Seed-to-sale regulation and its impact on supply chain
- Supply chain technology currently in-use and emerging technology
- Analyzing blockchain as a better way to handle supply chain regulation
- Impact of blockchain on consumer product safety transparency and traceability
- Exploration of blockchain efforts in the food and beverage space
- Key takeaways and unique insights
- Recommendations for the food and beverage industry
- A 10-year outlook of cannabis supply chain

Additionally, this report includes 6 exclusive, in-depth interviews with leading cannabis industry experts and entrepreneurs who promise to be major players in the coming years: distributors, security experts, software developers, and federal regulators.

# VERTICALLY INTEGRATED SUPPLIERS/MANUFACTURERS VS. INDEPENDENT DISTRIBUTORS

## WHO WILL BE THE BIG WINNER?





The cannabis industry will face many of the same supply chain challenges as industries like food and beverage. Fortunately, a lot of best practices will also crossover, opening the door for the beverage industry to stake a claim in the cannabis industry and redefine its own future and legacy. Will Jasper of MedMen speaks to the

importance of inter-industry exchange as the cannabis industry matures: "We're talking about an industry that is still in its infancy, while it's been around for decades on the black market, the legal market is fairly new and has a long way to go before maturity. Therefore, standard business practices, such as those used by Fortune 500

retailers, manufacturers, and food and beverage companies are being integrated into the industry by companies like MedMen and other large players. These companies are hiring people from analogous industries to bring those best practices to this newly found legal landscape."

While he acknowledges that most cannabis companies don't yet have the sophistication to currently integrate these practices, Jasper believes the following supply chain practices will be key in maturing

- Sharing B2B forecasts between retailers and manufacturers or retailers and distributors
- Creating accountability through vendor contracts
- Using ISO quality standards in manufacturing

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]



Jasper adds: "Other than the sheer growing pains of a new industry, you will see a lot of the same issues seen by other supply chains: natural disasters taking out crops (fires in California), taxes at multiple touch-points in the chain which drive up costs, theft, supply shortages driving prices up (as seen in Nevada), surplus of supply driving prices down (as seen in Colorado)."





Many in the cannabis industry believe that modeling the emerging cannabis industry on the beverage alcohol industry, specifically with regard to supply chain practices, is its best bet for success. This uniquely positions beverage industry companies and executives to leverage their expertise, stake a claim, and make their mark in this new-but-similar industry.

While all of the above cannabis supply chain challenges are areas in which the food and beverage industry have expertise and could enter and contribute to the cannabis industry, a few additional challenges are particularly well-suited for innovative food and beverage companies



## RETAIL

Dispensaries currently present a limited, antiquated cannabis experience, and one that largely still caters to the stereotypical male “pot head” consumer. Cannabis retail is ripe for outside assistance. Justin Singer suggests a type of “Retail 101” course for dispensaries:

“

---

*“Most of them have little-to-no understanding of basic retail best practices around pricing, merchandising, customer development, and inventory, and they're too proud to listen to their vendors (like us). If a distributor were to take on the role of independent educator, it would really help expand the industry in the mass-market direction they're most likely to be interested in serving. If all this industry ends up being is a market for shatter and wax, it's not going to be interesting to beverage folks, and it has the potential to do so much more if only someone can get these dispensary owners to reframe their thinking and apply basic retail principles to their business. That requires education, and I can't think of a better way for beverage companies to expose themselves to the reality of the industry, shape its future, and avoid regulatory issues than to act as educators.”*

---

Many brands and companies outside of cannabis are hesitant to get involved in the industry due to murky and conflicting state versus federal regulations. Education and consulting for cannabis brands is one way industries like food and beverage can establish their value and develop relationships without ever touching product.

## SALES AND MARKETING

Brand building is a specialty of the food and beverage industry, but it's an area that cannabis has little experience in and that lack of sophistication shows. Fortunately, the cannabis market is moving away from flower and deeper into beverages, edibles, and other products that benefit from strong branding. Some cannabis distributors are already trying to build up this side of the market. “In the liquor industry, it's all about the brand. You can have a great spirit, but if you don't brand it properly, you don't sell it. These drivers/salespeople are

delivering alcohol to the accounts, and they introduce them to new brands. That is a model we're starting to see in cannabis. We deliver product to a dispensary, and offer a 'gift pack' from one of our clients with some sample products. It's a way of acquiring customers for a new brand,” explains Terry Blevins of Armaplex. Food and beverage distributors are already well-versed in these sales tactics and can provide a competitive advantage to cannabis brands.



# A PERFECT FIT

Blockchain technology is seemingly a tailor made fit for the challenges facing not just the nascent cannabis industry, but also the new demands being thrust upon food and beverage supply chain participants. Dr. Darin Detwiler, who is a broadly-respected voice in food safety regulation, adds, "There's not a longstanding tradition or foundation that has to be changed – as there is in the food industry, that doesn't want to change. Cannabis is in its infancy at this scale, and it has the ability to really define itself in this space."

For purposes of comparison, let's take a look at what an ideal cannabis regulatory compliance system should look like:

## A GOOD CANNABIS REGULATORY TRACKING SYSTEM

	BLOCKCHAIN	LEGACY
MAINTAIN A PUBLICLY READABLE/ AUDITABLE RECORD OF ALL TRANSACTIONS	Blockchain technology is designed to be a public ledger, where all transactions are visible to anyone with access to the network. This transparency is a key feature of blockchain technology.	Legacy systems typically use a centralized database where transactions are recorded. This means that only those with access to the database can view the transactions, making it less transparent.
BE TOTALLY SECURE AND UNALTERABLE	Blockchain technology is designed to be secure and unalterable. Once a transaction is recorded on the blockchain, it cannot be changed or deleted.	Legacy systems are typically not as secure or unalterable. Transactions can be changed or deleted, which can lead to data integrity issues.
POSITIVELY IDENTIFY EACH PERSON INTERACTING WITH THE SYSTEM	Blockchain technology can be used to create a digital identity for each person interacting with the system. This allows for better tracking and identification of individuals.	Legacy systems typically do not have a way to positively identify each person interacting with the system.
BE ACCESSIBLE TO MULTIPLE PARTIES	Blockchain technology is designed to be accessible to multiple parties. This allows for a decentralized system where multiple parties can interact with the system.	Legacy systems are typically not accessible to multiple parties. They are often centralized, meaning only one party can interact with the system.
SUPPORT THE PROCESS FROM SEED-TO-SALE	Blockchain technology can be used to track the entire process from seed to sale. This allows for better tracking and identification of the product at every stage.	Legacy systems typically do not support the entire process from seed to sale. They often focus on specific parts of the process, making it difficult to track the product throughout its lifecycle.
MUST BE REAL-TIME IN TERMS OF SPEED	Blockchain technology is designed to be real-time. Transactions are recorded and confirmed almost instantly, allowing for real-time tracking and identification.	Legacy systems are typically not real-time. Transactions are often recorded and confirmed at a later date, making it difficult to track the product in real-time.



## SPECIFIC CHALLENGES/OPPORTUNITIES IN THE CANNABIS SUPPLY CHAIN



### GROWING STAGES

Particularly susceptible to food fraud, lack of purity, diluted product, farming practices (organic, non-GMO, etc), growing conditions, as well as labor involved (especially with growing food)



### DISTRIBUTOR

Proper storage (potential to affect product), inventory control (keeping track of all stock), proper transport (making sure items get safely to their destination. Potential for robbery, etc. as marijuana is highly valuable)



### MANUFACTURER

Improper labeling, handling, storage



### DISPENSARY

Here it could be possible to misrepresent the product, especially if anyone along the supply chain has compromised the product in any way. And the retailer will be the first person the consumer goes back to if anything goes wrong



# SUMMARY OF BLOCKCHAIN BENEFITS

## **DECENTRALIZATION**

It's harder to hack

## **FASTER/CHEAPER PROCESSING**

Doesn't pass through a bank

## **OPEN SOURCE**

Anyone can create one

## **TRUST**

Can trace where everything comes from;  
safeguards against fake products/makes  
transparency of origins and ingredients  
imperative

## Will Jasper

### Director of Supply Chain at MedMen

*Will Jasper is director of supply chain at MedMen, one of the leading cannabis companies in the country, and one of the companies that many industry insiders believe is the company to beat.*

**Q: What are some of the challenges you currently see or foresee in the cannabis supply chain?**

Where to begin... We're talking about an industry that is still in its infancy, while it's been around for decades on the black market, the legal market is fairly new and has a long way to go before maturity. Therefore, standard business practices, such as those used by Fortune 500 retailers, manufacturers, and food and beverage companies are being integrated into the industry by companies like MedMen and other large players. These companies are hiring people from analogous industries to bring those best practices to this newly found legal landscape.

Some of the key practices I'm referring to are sharing B2B forecasts (between retailers and manufacturers or retailers and distributors, etc.), creating accountability through vendor contracts, using ISO quality standards in manufacturing, extraction and cultivation, use of ERP and BI to make intelligent business decisions, sharing information cross functionally, such as demand planning and retail marketing collaborating for promotions and holiday business, the list goes on. The truth is, a lot of cannabis companies are not large enough or are too new to the market to be at this level of business maturity. However, as these



types of practices become normalized, you will see companies working their hardest to optimize their workflows and get in line with the rest of the market.

Other than the sheer growing pains of a new industry, you will see a lot of the same issues seen by other supply chains: natural disasters taking out crops (fires in California), taxes at multiple touch-points in the chain which drive up costs, shrink or theft, supply shortages driving prices up (as seen in Nevada), surplus of supply driving prices down (as seen in Colorado).

As each state's regulations on cannabis differ, a company must alter the way they operate within each state they do business. This includes how lot numbers are tracked, the sizes of the packages cannabis can be formed into for wholesale distribution, the taxes that are incurred, or the time at which a state mandated product should be lab tested. All of these differences play a critical role in how a company's systems should be set up and how the operations are run.

**MedMen**

# CANNABIS IS THE NEW ALCOHOL

Reinventing Cannabis for  
Sustainable Mainstream Use

JULY 2018

A  
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INNOVATION REPORT

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# ABSTRACT

Cannabis is the biggest consumer product category in 80 years, since prohibition — and the beverage industry is uniquely positioned to capitalize on this growing market. Why? Because the new cannabis consumer is the old alcohol consumer. And the two industries are sharing not only consumers, but leadership, best practices, technology, and regulatory challenges.

Research indicates that many alcohol consumers are switching to or plan to switch to cannabis as it becomes legal. New food and beverage product entries into this space are key contributors to the growth of this next phase of cannabis culture because a) the bulk of new use is by mainstream consumers who want a casual high similar to the alcohol drinking experience, and b) this user wants to replicate the social experience of drinking alcohol: it's a demographic that prefers to drink or eat rather than smoke, and is most amenable to ingesting the substance over the course of an evening, slowly, in liquid or low-dose edible form.

The beverage industry is best positioned to help the new cannabis consumer replicate the social intake experience they are accustomed to with alcohol, but with fewer side effects.

This report takes a deep dive into the growing category of cannabis consumables, with an emphasis on beverages, including trends, on-premise opportunities, regulatory considerations, scientific advancements, marketing, and notable early products and brands.

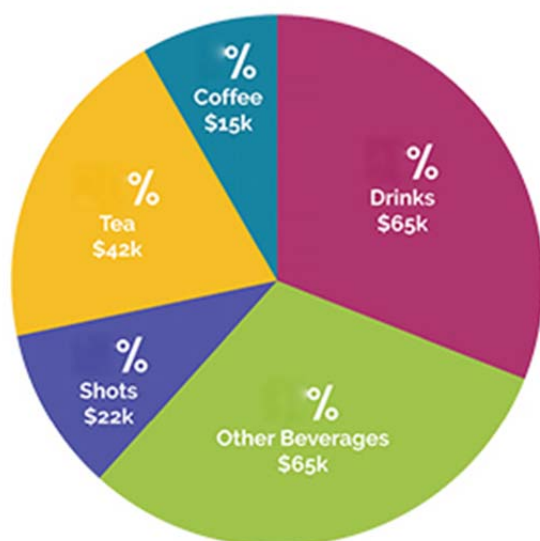
**This report includes:**

- A history of liquid cannabis
- Market stats with regard to both cannabis as a whole and the cannabis beverage market
- Regulation updates, including beverage-specific regulations
- The Canadian market as it becomes federally legal
- Banking regulations and banks that work with cannabis companies
- Notable cannabis advocates
- Trends and regulations in restaurants, bars, and other on-premise consumption sites, as well as regulations pertaining to them
- New and groundbreaking retail models for cannabis
- Safety, sobriety testing, and a guide to physiological responses from cannabis
- Corporate cannabis investment, including food and beverage investment
- Marketing and consumer education, including ad campaigns and packaging
- Opportunities and challenges surrounding cannabis beverages, including the science of liquid cannabis
- A thorough guide to most major cannabis beverages currently on the market and in development
- Cannabis' effect on non-cannabis beverages
- Beverage executives moving over to cannabis
- Best practices from the beverage industry informing the cannabis industry
- Opportunities for involvement and investment by the food and beverage industry
- Key takeaways and unique insights
- A 10-year outlook for cannabis in food, beverage, retail, and on-premise

Additionally, this report includes originally designed infographics and five exclusive, in-depth interviews with leading cannabis industry experts and entrepreneurs within cannabis food, beverage, and retail.

## CANNABIS BEVERAGE SALES IN OREGON

*Market share by beverage type, 2017*



*Source: Beverage Marketing Corporation; HVCK*

# ADVERTISING NON-CANNABIS FOOD AND BEVERAGES TO CANNABIS USERS

The correlation between cannabis consumption and the munchies is well-known. And some fast food chains are capitalizing on this opportunity to be the go-to choice for hungry cannabis consumers.

In one study, cannabis consumers indicated overwhelmingly that McDonald's was their favorite fast food chain, with 43% indicating that preference. Taco Bell came in a distant second with 18%, followed by Wendy's, Burger King, and Subway. Also included in the top ten

were Kentucky Fried Chicken, Arby's, Chick-Fil-A, Jack-In-The-Box and Carl's Jr.

Despite McDonald's reputation amongst cannabis consumers, the company distances itself from this demographic. A New Mexico franchise outpost of McDonald's (near the Colorado border where cannabis is legal), posted a billboard saying, "Usually when you roll something this good, it's illegal!" next to a picture of a breakfast burrito.

The billboard was taken down and McDonald's condemned it.

Not every chain is taking the McDonald's approach. Some chains, like Denny's and Chipotle, have directed their social media content to this demographic — Chipotle has even used the exact phrase that McDonald's condemned as commentary on social media posts to promote their burritos. Jack-In-The-



Follow

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# MARIJUANA-LACED WINE

California-produced marijuana wines got their start back in the 1980s. Most used rose and the bottles sold for upwards of \$100, given the “war on drugs” government crackdown and the risk involved with production. Most marijuana-laced wines sell for far less today (particularly in places like California) and are most likely to use red grapes, like cabernet sauvignon or syrah.

A pound of high-quality marijuana is placed in a cask of fermenting wine, yielding 1.5 grams of cannabis per bottle. The alcohol produced from the fermentation process extracts the THC.

Some pot wine makers keep it in the barrel for nine months before bottling and serving, for maximum extraction.

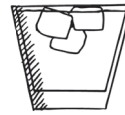
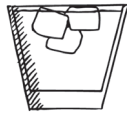
And since cannabis is delivered into the system more quickly via beverages, these drinks are preferred to other edibles alternatives, not to mention the high induced by the cannabis and alcohol combo.

Due to regulations around selling products that contain both alcohol and cannabis, other vineyards, like Rebel Coast Winery, is selling marijuana-laced non-alcoholic wine.

[SOURCES: The Daily Beast, Newsweek]



# SHARING BEST PRACTICES



## DISTRIBUTION

The cannabis industry faces the same sort of regulation and distribution challenges that the alcohol industry faces, and a great deal of money and opportunity lies in distribution expertise. In fact, new California regulations around distribution are modeled on the post-Prohibition laws intended to limit mafia power. This means cannabis distribution is likely to be quite lucrative and positions alcohol companies to be central players, if and when they choose to enter the market.

## CULTIVATION AND MANUFACTURING

Tony Magee, founder of Lagunitas Brewing Co., says "Cannabis cultivators are tapping into the experience of hop growers in the Yakima region of Washington State, and craft brewers are starting to implement extraction technologies honed by marijuana manufacturers." Le Herbe beverage company recently designed one of the biggest cannabis manufacturing facilities in Southern California, just for cannabis beverages, and are expected to break ground in Q4 2018, and will be up and running Q1 2019. "People are stuck after they develop a great idea for a product — they don't know how to mass produce it," says co-founder Jay Grillo.

Companies like Yofumo are drawing inspiration from the alcohol industry by aging cannabis similarly to wine or whiskey. Curing cannabis preserves it and increases potency, smell, and flavor, by bringing out natural terpenes of various marijuana strains. Unlike most commercial growers that cure their cannabis by sealing it and leaving it for weeks or months, the "Yofumo Pro" curation process allows for humidity, temperature, and antimicrobial control, which can produce new flavor profiles through the curation process. Their new product lines will target consumers, not just commercial growers.





# INDUSTRY INSIGHTS

## Interviews With Cannabis Innovation Leaders

### Tarek Tabsh Cannabis serial entrepreneur

*Tarek Tabsh is the co-founder of Province Brands, a technology-driven company developing groundbreaking products (including cannabis beverages) and IP using cutting-edge cannabinoid science. He is the co-founder of Oxford Cannabinoid Technologies, a biopharmaceutical company focused on researching, developing, and licensing cannabinoid-based compounds and therapies, and is the co-founder and chief strategy officer of Forma Holdings, which builds businesses in legal medical cannabis markets around the world. He is the founder of Los Angeles and Las Vegas dispensary New Amsterdam Naturals, voted by High Times as one of the top dispensaries in LA and won the High Times World Cup 3 times. Tabsh serves on the selection committee for The ArcView Group, which facilitates the emergence of the legal cannabis industry by connecting forward-thinking investors, visionary entrepreneurs, and cannabis consumers in an effort to meet the expanding and changing needs of responsible cultivators, dispensaries, and customers nationwide. Tabsh also serves on the board of directors for Librede, which focuses on metabolic engineering, synthetic biology, and platform technologies that enable the creation of new therapeutic molecules. Librede has developed the world's first biosynthetic, yeast-based cannabinoid production and drug discovery*



*platform to create chemical compounds that target the endocannabinoid system (ECS).*

#### **Q: When did you get in the market and how have things evolved?**

I was the youngest dispensary owner in the country in LA and have been in the industry for 10 years. I've seen the evolution of the market and am a veteran in the industry. 10 years ago, the industry was filled with scumbags.

Now there's new wave of cannabis coming that goes beyond smoking dope and dabs and bongos. It's the cannabis 2.0 wave of more discrete, socially acceptable methods of ingestion.

