

# CANNABIS INDUSTRY

YEAR-END REVIEW

# 2021



**A KERNA**  
CORP.



# QUICK HIT: TOP SALES DAYS OF 2021

Below are the top single sales days of 2021, which correlate with nationally celebrated holidays in the United States.





# Introduction

Welcome to Akerna's year-end review of the cannabis industry.

As the technology ecosystem for cannabis, we diligently track data and information and share it with our clients to help them make data-driven decisions for their businesses. We use that same information, coupled with broader industry research and insights, to curate these semi-annual reviews on the ever-changing cannabis industry. Even after 25 years of medical legality and almost a decade of adult-use, it is still considered an emerging industry and therefore sees an immense amount of change throughout the year.

This data-based report is for any business owner looking to make data-driven decisions for their business, any investor looking to learn more about the promising cannabis industry, and any consumer interested in learning more about how the cannabis industry works and how their products are made safely.

This year will be remembered in cannabis history as the first-ever to see comprehensive cannabis legalization bills, most notably the Cannabis Administration and Opportunity Act from Senate Majority Leader Schumer (D-NY), and Senators Booker (D-NJ) and Wyden (D-OR), and the States Reform Act from Representative Mace (R-SC), the latter of which I had the honor of attending the unveiling of the bill draft in Washington DC. These bills, combined with multiple other indications from both sides of the aisle, have proven that cannabis reform is bipartisan. And why shouldn't it be? [More than two-thirds](#) of Americans support legalizing cannabis. With the upcoming 2022 midterm elections, I expect to see multiple politicians running on pro-cannabis platforms.

As more Americans gained access to cannabis, 2021 brought the largest cannabis sales day ever in the US, with \$111.8 million spent as cannabis consumers celebrated 420, the unofficial cannabis consumption holiday. 420 was one of many occasions that topped the industry's top sales days of the year as Americans showed they like to celebrate with cannabis.

We saw New York, Virginia, New Mexico, and Connecticut legalize adult-use cannabis, and Alabama legalize medical use, while internationally, Germany, Mexico and Malta legalized adult-use, among other moves domestically and abroad.

Canada's fully legal market set an example for other countries hoping to legalize cannabis federally. The Medical Cannabis Authority in St. Vincent and the Grenadines modeled their cannabis CRM program after seeing the success of Akerna's Ample product in Canada, marking the first time a nation has implemented a federal cannabis technology system.

On the operator side, consolidation continued to be the name of the game, with records set in both M&A and capital raises. As the industry continued to grow and mature, operators sought to increase their footprints, relying on enterprise-level software, such as Akerna's, to do so.

While the multi-state operators and largest brands earn a lot of attention in the industry, it's crucial to bring attention to and find ways to support the smaller boutique and cottage operators as our industry continues to grow. California has a wonderful hub and spoke model used in their prominent wine industry, replicated in multiple boutique cannabis businesses. In this model, small operators can send their harvest to one central location for manufacturing and distribution and then get their piece back for selling, allowing them to optimize manufacturing, manage distribution, and scale efficiently. I would love to see this framework pop up in every legal state to continue to support these outstanding and dedicated smaller businesses.

While the cannabis industry is still nascent, I hope that future reform will come with inclusivity, high ethical standards, support for equity businesses, and a framework that supports cottage and boutique operators. These are the necessary steps to ensure that the rapid growth of our industry ensures fairness to those groups.

I can't wait to see what 2022 brings.

*Sincerely,*

**Jessica**



Jessica Billingsley serves as Akerna's Chief Executive Officer. She is an accomplished innovator, executive, and board member in public and private international technology with over 20 years of experience. She co-founded MJ Freeway in 2010, where she served as President until April 2018, and later as the CEO until MJ Freeway was acquired by MTech to form Akerna. Shortly after, as CEO, Jessica led Akerna to become the first cannabis technology company listed on Nasdaq.





## TABLE OF CONTENTS

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<b>Quick Hit: Top Sales Days in 2021</b> .....	2
<b>Introduction</b> .....	3
<b>Quick Hit: Current Status of U.S. Federal Cannabis Reform Efforts</b> .....	6
<b>Cannabis Markets &amp; Investing: Trends and Forecasting</b> .....	7
<b>Journalist Thoughts on the Year</b> .....	10
<b>Data Snapshot: Consumer Facts &amp; Spending</b> .....	12
<b>Quick Hit: US Cannabis Council</b> .....	16
<b>Quick Hit: 2021 Cannabis Consumer Snapshot</b> .....	17
<b>Cannabis Marketing Trends for 2022: Navigating the Present While Predicting the Future</b> .....	18
<b>Quick Hit: The Akerna Family of Companies</b> .....	21
<b>Using eCommerce to Drive Cannabis Sales</b> .....	22
<b>Quick Hit: Cannabis Laws in the US</b> .....	26
<b>Conclusion</b> .....	27



# QUICK HIT: US FEDERAL REFORM ACTION IN 2021



## **CANNABIS ADMINISTRATION AND OPPORTUNITY ACT**

*Sen. Majority Leader Schumer (D-NY), Sen. Booker (D-NJ), and Sen. Wyden (D-OR)*  
**Bill draft is being finalized**

Bill seeks to legalize cannabis by ending federal prohibition and addresses states' rights, expungement of records, regulatory framework, federal tax structure and includes protections for emerging and social equity businesses.

## **STATES REFORM ACT**

*Rep. Mace (R-SC)*

**Introduced in the U.S. House of Representatives but has not faced a vote**

Bill seeks to legalize cannabis by removing it from the list of federally controlled substances and addresses state's rights, federal framework, expungement, federal tax, small business protection, trade, and medical protections.



## **COMMON SENSE CANNABIS REFORM FOR VETERANS, SMALL BUSINESSES, AND MEDICAL PROFESSIONALS ACT**

*Rep. Joyce (R-OH)*

**Introduced in the U.S. House of Representatives but has not faced a vote yet**

Bill seeks to deschedule and federally legalize cannabis and addresses research, imports and exports, financial institution access, veteran access, states' rights, and establishes a regulating body. This bill draft does not contain social justice provisions.

## **SECURE AND FAIR ENFORCEMENT BANKING ACT (SAFE BANKING ACT)**

*Rep. Perlmutter (D-CO)*

**Bill has passed in the U.S. House of Representatives a couple of times and was introduced in the Senate by Sen. Jeff Merkley (D-OR) but has yet to be voted on; there have been multiple efforts to weave it into larger reform bills, but none have been successful yet**

Bill seeks to create protection for traditional financial institutions to provide financial services to legal cannabis businesses.



## **MARIJUANA OPPORTUNITY, REINVESTMENT AND EXPUNGMENT ACT (MORE ACT)**

*Rep. Nadler (D-NY)*

**Bill has previously passed in the U.S. House of Representatives but has yet to make it to the Senate floor**

Bill seeks to remove cannabis from the Controlled Substances Act and end criminal penalties under federal law. In addition to federally decriminalizing and descheduling cannabis, the MORE Act includes multiple social justice and equity provisions.



# Cannabis Markets & Investing

## Trends and Forecasting

### By Tahira Rehmatullah

**CEO & Co-Founder of Commons, Partner at Highlands Venture Partners, & Member of the Board of Directors for Akerna Corp., Ceres Acquisition Corp., and Superette**

Although the legal US cannabis market is still in its infancy, 2021 has been a record year not only for capital raises and M&A activity but also for stock market losses and volatility. For economic, political, and social reasons, the near-term and future growth potential of the cannabis industry is as exciting as ever. However, public market sentiment has proven volatile.

Let's start with the less fun news – the stock market. Even though cannabis continues to be ripe for growth, presenting unique arbitrage opportunities for investors across verticals, the market's downward trend heading into year-end has been frustrating for many cannabis investors. Investors raced into 2021 with high hopes (pun absolutely intended) after brightened sentiment resulting from the November 2020 elections. The expectation for significant progress toward federal legalization in 2021 lifted everyone's spirits but has now left many disappointed and with losses that are not for the faint of heart.

Now, it's important to mention here that while the market is a fluid, responsive instrument, in contrast, governments are heavy, bureaucratic organizations that are designed to include many checks and balances. As a result of these additional steps and procedures, governments make decisions and enact policy on a much slower timeline. For example, the fact that Congress saw two comprehensive cannabis bills - one of which was proposed by a republican - is a massive step, one that would be unheard of only a few short years ago. While everyone, including the average retail investor, may have hoped for sweeping, immediate federal legalization with the new administration, the reality is that the federal government is acting within parameters and constraints that result in progress being defined in a different way than most would expect. For now, wins are demonstrated through actions such as the bipartisan support of cannabis.

The New Cannabis Ventures Global Cannabis Stock Index, managed by Alan Brochstein, shows 2021 giving up gains from 2020 as well as showing negative returns in 2018 and 2019. For the week ending December 17, 2021, the Index posted a new 52-week closing low. Ouch!

As the primary holders of the stock, retail investors still drive much of the upward and downward movement in American cannabis stocks, but in a positive trend, institutional investor appetite increased in 2021. ETFs, like AdvisorShares Pure US Cannabis ETF (MSOS), have also provided access to investors who don't trade OTC cannabis company stocks. Ancillary businesses – those that do not touch the plant – have managed to list on higher exchanges and allowed institutional investors to participate. Examples include GrownGeneration Corp. (GRWG) and WM Technology, Inc. (MAPS).

Across the board in the cannabis world, a trend I'm noticing is that there seems to be a disconnect between public and private valuations. While private markets are still quite frothy, public stocks are comparatively on sale. To me, this trend indicates a need to return to the fundamentals of investing in cannabis businesses: what is their true underlying intrinsic value? In addition to buying stocks when they are on sale, savvy business leaders also know that M&A activity is a high indicator of confidence in the future of an industry. As you likely know, cannabis M&A activity has been on fire in 2021. So much so, in fact, that many believe the pace of activity is a leading indicator of the inflection point of the cannabis industry. This trend can be attributed to a few key reasons: the emergence of cannabis SPACs, multi-state operators' (MSOs) stock buying power and appetite for a growing footprint, and the need for consolidation as markets mature and companies need to strengthen balance sheets, fight competition, and diversify offerings.

A few examples of M&A activity that has grabbed headlines in the past few months alone are:

- November 2021: Harborside announced a business combination with Urbn Leaf and Loudpack, creating StateHouse Holdings. Harborside said the combined revenue for three entities is roughly \$165 million for the first nine months of 2021.
- October 2021: Agrify acquired Precision Extraction Solutions and Cascade Sciences, two of the leading cannabis and hemp extraction, post-processing, and testing equipment and services companies, for \$50 million.
- September 2021: TerrAscend bought Michigan cannabis operator Gage Growth for \$545 million in stock. The combined business will have operations in 5 states and Canada, including seven cultivation and processing facilities and 23 operating dispensaries serving medical and adult-use cannabis markets.

As the Canadian market has become more fragmented, with the largest licensed producers losing market share compared to last year, north of the border M&A activity has interestingly picked up. Cross-border transactions have been even more interesting to observe, creating options for Canadian cannabis businesses to enter the US market through both cannabis and non-cannabis opportunities.





For example, in October 2021, Canopy made an upfront cash payment of \$297.5 million for the right to acquire Wana Brands upon federal permissibility of THC in the US. In December 2021, Tilray announced the acquisition of Breckenridge Distillery in Colorado as part of the company's strategic positioning in the US. Proceeds of the transaction were not disclosed, but management believed the deal to be immediately accretive.

Though it often feels like the cannabis market exploded overnight, the cannabis wave began on the west coast in 2012 and has steadily swept through the Midwest and east coast. Even as state-level regulations continue to proliferate, the question about regulatory reform and ultimately federal legalization remains. The SAFE Banking Act, which would have provided safe harbor to financial institutions that want to offer banking services to the US cannabis industry, failed to be included in the final version of the National Defense Authorization Act for Fiscal Year 2022 in December. Though both democrats and republicans remain adamant about finding a path to passage, many CEOs of the largest cannabis companies in both the US and Canada don't expect US federal legalization anytime soon. Hope does remain around Congress passing some reform in 2022, namely around decriminalization or SAFE Banking.

Ultimately, even without federal regulatory backing, the US cannabis market is the largest in the world. Despite market slumps, as more states legalize both medical and adult-use markets, new doors will continue to open for both old and new companies to establish themselves in one of the fastest-growing consumer markets history has ever seen.



## About the Author

Tahira Rehmatullah is the CEO & Co-Founder of Commons, Partner at Highlands Venture Partners, and member of the board of directors for [Akerna Corp.](#), Ceres Acquisition Corp., and Superette. Since entering cannabis in 2014, Tahira has held positions at MTech Acquisition Corp., Hypur Ventures, Marley Natural, and Privateer Holdings, and prior to that, at City First Enterprises, Perry Capital, and Ernst & Young. She also serves on the board of directors for the [Last Prisoner Project](#) and is dedicated to developing female and minority leadership in the industry. Tahira earned her MBA from the Yale School of Management and BS in Finance from The Ohio State University.





## Journalist Thoughts

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### **By Javier Hasse**

Managing Director, Benzinga Cannabis & CEO, El Planteo

In 2021, the cannabis industry continued its path towards consolidation on a global scale, showcasing some of the growing pains of a young but maturing market.

North America is no longer the focus point of international cannabis news. Both Europe and Latin America took major steps towards the establishment of an international cannabis market with solid foundations and immense growth opportunity.

### **The Global Expansion Of The Cannabis Market**

With a new government in place, Germany – already a heavy hitter in the European cannabis landscape – announced plans to go fully legal; an event that had been shelved for the 16-year long period in which Angela Merkel led office. Next door in Switzerland, a cannabis pilot program was reported to launch in 2022. It will allow marijuana to be sold in the city of Zurich in pharmacies and cannabis clubs.

Smaller members of the European Union crossed the legalization threshold even sooner. In 2021, the Mediterranean country of Malta and the small nation of Luxembourg legalized the cultivation and possession of cannabis.

Across the Atlantic and heading south, Argentina created the Cannabis Program Registry (REPROCANN), which allows people to access a controlled cultivation and transport of medical marijuana.

In Mexico, the Supreme Court of Justice moved to decriminalize the adult or recreational use of cannabis. This means people are now able to consume and transport cannabis, but not without first requesting permission from the Mexican government.

Colombia approved a legal framework for the production and commercialization of hemp for industrial and scientific purposes, opening up new opportunities for open-air farmers across the country.

## **Cannabis Gaining Ground In The US**

2021 was also a winning year for the US cannabis industry, as far as regulation goes. Several states advanced with the legalization and regulation of medicinal cannabis or adult-use at various levels.

The year created new cannabis opportunities in Alabama, Connecticut, Georgia, Idaho, Louisiana, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, Pennsylvania, Tennessee, Texas and Virginia.

All of these states have now been granted new fertile soil for the further development of a growing cannabis market. That makes for more than 35 states plus the District of Columbia where some form of legal cannabis is now allowed, with 20 of those featuring full adult-use laws.

In spite of the crop growing in popularity and acceptance across the country, during 2021, the public companies in the cannabis space experienced some volatility.

Cannabis ETFs ended the year in the red. While the S&P500 advanced nearly 30%, major cannabis ETFs fell more than 22% - with CNBS posting the smallest losses.

This, however, didn't stop a significant number of companies from going public or uplisting on the NYSE and NASDAQ, further cementing the industry's position across legacy financial institutions.

SPACs, or Special Purpose Acquisition Companies, continued to proliferate and, with them, so did the flow of capital towards ancillary companies that do not touch the plant.

Data from Viridian Capital Advisors shows that investor excitement for the cannabis industry remains bullish, with about \$13 billion invested in cannabis throughout the year, compared to roughly \$4 billion in 2020.

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### **By Debra Borchardt**

Co-Founder, Executive Editor at Green Market Report

2021 wasn't great for cannabis stock prices, but the industry itself progressed in many ways. Sales continue to hit new record levels every month with this last holiday reporting millions in sales over last year. New Jersey and New York both made big advances towards legalization. It looks like New Jersey will beat New York with products on the shelves first, but it looks like New England is poised to come on strong in 2022 after laying the groundwork in 2021.



# Data Snapshot

## Consumer Spending & Trends

### By James Ahrendt

Business Intelligence Architect, Akerna

A century ago, the world's most valuable resource was oil. [Today, it is data.](#)

As the technology ecosystem for cannabis, we diligently track data and information for our clients to help them make data-driven decisions that optimize their business. Our data is based on more than ten years of legal cannabis retail sales - we use it ourselves to make strategic decisions about our business.

2021 brought up plenty of new data points and sales; here are some that stood out to me:

### Top Cannabis Sales Days

This year, American cannabis consumers proved that they like to celebrate holidays with cannabis. 86% of the top 15 sales days correlated directly with either an official holiday or widely known but unofficial one.

When holidays fall on a weekend, data shows that consumers will spend the largest amounts of money the Friday ahead of that holiday. This trend held up for major holidays including Memorial Day, Fourth of July, Labor Day, and Halloween.

We saw the largest sales day in legal cannabis history in 2021 when cannabis consumers purchased \$111.8 million of products on Friday, April 20th, for 420, the unofficial cannabis consumption holiday dating back to the 1970s. In comparison to 2020's top sales day (12/31/20), this year's top sales day saw a 25% increase in overall sales.

But 420 wasn't the only record-breaking day – if you compare last year's top sales day (12/31/20) to this year's top sales days, 2020's top day would only rank eighth in 2021 sales:

TOP 15 SALES DAYS	TOTAL SALES	DATE INFO
4/20	<b>\$111.8M</b>	420
11/26	<b>\$99M</b>	Black Friday
11/24	<b>\$98.2M</b>	Green Wednesday



12/23	<b>\$94M</b>	Thursday before Christmas
9/3	<b>\$90.1M</b>	Friday before Labor Day
3/17	<b>\$89.8M</b>	St. Patty's/Stimulus Checks
7/2	<b>\$89.6M</b>	Friday before 4th of July
12/31	<b>\$88M</b>	New Year's Eve
5/28	<b>\$86.9M</b>	Friday before Memorial Day
4/16	<b>\$85.3M</b>	Friday before 420
10/1	<b>\$84.4M</b>	No major holiday/correlation
7/30	<b>\$82.4M</b>	No major holiday/correlation
10/29	<b>\$81.5M</b>	Friday before Halloween
12/24	<b>\$81M</b>	Christmas Eve
12/30	<b>\$79M</b>	Thursday before New Year's Eve

While 12 of the top 15 sales days correlated directly with holidays, two of them – October 1st and July 30th – did not. However, both dates fell on a Friday and could have likely been days many cannabis consumers received their paychecks.

## Women & Cannabis

Over the past few years, we've noted that women are one of the fastest-growing consumer segments within the cannabis industry, a trend that held up in 2021, with 1.7% year-over-year growth. That may seem like a slight shift, but it's pretty sizeable when you consider the millions of cannabis consumers in the US.

YEAR	MARKET SHARE - WOMEN
2019	<b>35%</b>
2020	<b>36.6%</b>
2021	<b>38.3%</b>

When it comes to product choices for women, we found another interesting shift in preferences: while cannabis flower has always been, and still is, the top product for all ages of women, 2021 saw a 2.4% increase in women purchasing flower. This could result from various factors but considering that cannabis flower is one of the most well-known products, it is possible that as cannabis continues to become more accessible to the mass population, people choose what they know best - flower.



After flower, cartridges and pens were the most popular category for women of all ages. In fact, for all age groups under 60, women spend about 34% of their cannabis dollars on cartridges and pens. However, for women over 60, that declines to 29%. After the vaping crisis in 2019, this category saw a decline in sales percentage but rebounded in 2020 and 2021.

Concentrates became the third-largest spending category for women in 2021, overtaking edibles for the first time ever. There is a direct correlation between age and concentrate sales – women under 30 spend 13% of their cannabis dollars on concentrates, a percentage that gradually drops as age groups go up, declining to 5% sales share for the over 60 age group. Concentrates are perceived as a more complicated and advanced consumption method, which could be why they appeal the most to younger populations and less to more elder groups.

Although infused edibles moved behind concentrates in spending popularity, they still earned 8.8% of sales from women buyers. Like concentrates, edible spending directly correlates with age but in the opposite way - women under 30 spend 5.1% of their cannabis dollars on edibles, increasing gradually per age group up to 19% edible sales for women over 60. Edibles provide a discreet form of cannabis consumption and easy dosing, which is likely why they appeal to older populations.

## **Millennials & Cannabis**

We hear about millennials and their spending power all over the news and internet, but do those trends hold up for cannabis? Absolutely.

Cannabis consumers under the age of 40 made up 58.9% of total cannabis spending in 2021, with older millennials accounting for 30.5% and younger for 28.4% of sales.

Where older generations may still have stigmas against cannabis, millennials have grown up alongside the legalization of cannabis, which has modernized the industry and fine-tuned the product offerings – this isn't Woodstock pot anymore.

As the cannabis industry continues to reach new consumers and stigmas increasingly decrease, I am interested to see if other generations will take a larger share of the pie.

Through crystallizing connections in the cannabis supply chain and providing valuable input on processes, Akerna data supports cannabis businesses in several areas, including strategizing, optimizing, identifying problems, planning, and reporting.



## About the Author

James has been with Akerna over five years, where he built the company's business intelligence and data products. He has 10+ years' experience in BI in industries including higher education, healthcare and cannabis.

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*Are you interested in learning more about how data-driven insights can power your cannabis business?*

*Click here for more information on [Akerna's MJ Platform & MJ Analytics](#)*



The Cannabis industry and its future are inextricably linked with social equity. As we approach federal legalization in the US, it is imperative that criminal justice reform and social equity provisions be included in comprehensive reform efforts.

To ensure a fair and just future for cannabis, Akerna is a proud member of the US Cannabis Council (USCC), where our CEO Jessica Billingsley serves as the group's first-ever Board Chair.

USCC works hand-in-hand with Congressional leaders in Washington, DC and with stakeholders across the nation to advance cannabis reforms that promote social equity and fair, safe, and well-regulated markets.

### **Who We Are**

As a first-of-its-kind strategic alliance, USCC combines the collective resources of many of the largest cannabis companies, prominent advocacy organizations, and hundreds of thousands of individuals to speak in one voice for ending federal prohibition and creating an equitable and values-driven cannabis industry with social, financial, and environmental benefits shared by all.

### **Our Mission**

USCC's mission is to build a future of legal access to cannabis delivered through an equitable and values-driven industry by advancing cannabis legalization at the federal and state level, and promoting restorative justice for communities harmed by cannabis prohibition.

### **Our Values**

- Social equity for communities negatively impacted by the prohibition on cannabis
- Expungement of criminal records and de-incarceration for past cannabis offenses
- High ethical standards and accountability measures within the cannabis industry
- Safety and responsibility in the cannabis industry and consumption culture





# QUICK HIT: 2021 CANNABIS CONSUMER SNAPSHOT

January to December



## BASKET SIZE

<b>Medical:</b>	<b>\$120.08</b> average total dollar amount per order	<b>2.87</b> average number of products per order
<b>Adult-Use:</b>	<b>\$75.89</b> average total dollar amount per order	<b>2.92</b> average number of products per order

## DEMOGRAPHICS

SALES BY AGE GROUP	<b>Under 30</b>	<b>28.4%</b>
	<b>30-40</b>	<b>30.5%</b>
	<b>40-50</b>	<b>19.5%</b>
	<b>50-60</b>	<b>11.8%</b>
	<b>Over 60</b>	<b>9.8%</b>

## SALES BY GENDER





# Cannabis Marketing Trends for 2022

## Navigating the Present While Predicting the Future

**By Brad Bogus**

**Vice President of Marketing & Communications, Akerna**

The cannabis industry has a plethora of unique restrictions and regulations governing nearly every facet of the industry. From dictating how companies package their product, to ensuring adherence to government regulations, to prescribing how and where a company can market their products, there are many ways that the cannabis industry is subject to the enforcement of unique rules. The complexity only escalates when a company targets multiple geographic markets, as each state - and sometimes, each municipality within each state - have varying operational requirements.

This is a huge problem for brands, but how do we solve it? After all, marketing is key to creating and maintaining brand equity, or the worth of a brand.. Brand equity is critical to sway consumers to choose your product over other brands with similar products. Here, we will elaborate on some challenges the cannabis industry faces and what you as an operator can do to strengthen your brand.

### **Channel Challenges**

As a marketer in this industry, you are forced to watch the rest of the marketing world drive itself forward using cutting edge digital tactics while you are left unable to employ them, lest you get shut down or banned by the channels you need to use.

But why exactly is this the case?

The cannabis industry in the US is currently run exclusively on a state-by-state basis. This means that regulations and restrictions on traditional marketing channels are completely different from state-to-state. Some states allow cannabis companies to rent billboard space. In other states, the best you can do is an "Adopt a Highway" sponsorship. Throughout the US, TV and radio advertisements are off-limits due to FCC regulations.

Looking for digital channel solutions? Self-service options that small businesses traditionally thrive on, such as Google and Facebook, both prohibit cannabis-related advertising due to their terms and conditions. Organic content via social media also poses challenges, as the platforms tend to view posts referencing cannabis products as a violation of their terms and conditions.

Options within the industry remain available to marketers by utilizing leading cannabis publishers, marketplaces, and events. There are even some digital ad networks devoted just to cannabis, although I have not yet heard any great stories of effectiveness using them. The most exciting opportunities offer marketers the ability to communicate directly to your customer base, which we'll dive into below.

## **Positioning Your Brand**

Who is the customer your brand is going to sell to? At Akerna, we are always looking at the future and finding ways to apply it to our present. Brands and marketers must do the same, while maintaining awareness of the present situation and making decisions that reflect reality to drive sales.

One great example of this is choosing where to compete. We hear a lot about the 70% of Americans that support medical cannabis legalization, but what about the remaining 30%? Do they represent the "untapped market" we should work to convince? Or do they represent the unreachable? Furthermore, while we know who is buying most of the cannabis today, what about the future buyer? Should brands and retailers position to acquire the senior shopper or the Whole Foods soccer parent that only buys a small portion of the cannabis sold today?

There are so many brands angling for that Whole Foods shopper. In fact, brands have begun as long as 5+ years ago to capture this customer. However, even this many years later, that shopper is still just a blip in the 2021 sales data. The majority of cannabis sold are potent flower and concentrates. A very small but rapidly growing product category over 2020-21 was beverages, but again, is this where you should invest your money as an emerging brand?

The fact remains that positioning your brand to survive and win in a highly competitive, small-but-growing segment means very tough roads ahead or lots of capital investment required to make it the distance. We still don't know if these segments or categories are truly going to take off any time soon. How long is that road, how hard is that struggle? Look at the biggest and highest selling brands in the space, and you won't see many products at all that cater to that customer. You will find brands like Cookies, Select, Stiizy, and other large flower and concentrates brands.

It might be worth choosing which race to run in and sticking to it with conviction (or loads of cash to buy you the time). As it currently stands, the vast majority of the money to be made is where the customers are buying.

## **Strengthening Your Brand**

While advertising and marketing restrictions pose a major challenge, 2021 saw the industry catching up in the Direct to Consumer (D2C) space. Rather than relying solely on cannabis marketplaces such as Leafly or Weedmaps, brands and retailers can now take advantage of dedicated eCommerce pages and text promotions without exposing their customers to competitive brands and stores - a major challenge in shared marketplaces.



Akerna Connect gives brands and retailers direct access to their consumers through text and dedicated eCommerce, as well as providing a loyalty platform. Akerna Connect also empowers those brands to do business with each other using a dedicated wholesale menu that can be custom tailored with specific items available at special prices set for any individual buyer. This is a great option that doesn't force brands into a B2B wholesale or B2C marketplace where they are forced to compete at the lowest price. Yet again, this represents the future, today.

The true challenge for cannabis brands is choosing which bets on the future to make while acknowledging what realities exist in our present that we must address. Technology leaders like Akerna are here to bring the future to marketers and brands, and to help them achieve what is realistically possible today. As the progenitors of seed-to-sale software, we applaud leaders that innovate and pave the way for the future. At the same time, understanding the realities of today are the key to survival. Innovation is the key to tomorrow.



### About the Author

Brad Bogus is a marketing, communications and Corporate Social Responsibility leader who has spent much of his career as an entrepreneur and advisor to start-ups. He has 16 years of marketing leadership experience in companies ranging from cannabis software and media publishing to marketing agencies and eSports gaming.



*Are you interested in learning more about the cannabis industry, Akerna, and our family of cannabis technology solutions? [Subscribe here for updates.](#)*



## QUICK HIT: THE AKERNA FAMILY OF COMPANIES

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**MJ Platform** is the first cannabis-specific software that tracked every gram, from seed-to-sale. MJ Platform provides data-driven, cannabis technology solutions that deliver return on investment value across the entire cannabis supply chain.



**Viridian Sciences** offers all-in-one business management software solutions for the cannabis industry. Built on the infrastructure of SAP Business One Viridian Sciences. It provides the most advanced seed-to-sale technology available with world-class integrated financial cost and project tracking.



**Ample Organics** is a software company building technology to support cannabis businesses. Ample Organics develops tools that foster transparency, facilitate compliance, and build trust between cannabis licence holders, government bodies, and the public.



**Trellis** seed-to-sale management software ensures your operation is compliant with cannabis regulations. Trellis delivers the functionality required to meet the regulatory requirements, in addition to optimizing operations and increasing efficiency - from cultivator, manufacturer, distributor to retailer.



**Leaf Data Systems** provides government clients with a compliance technology solution with safety for cannabis programs built in. Using a closed-loop platform and advanced tagging technology, with Leaf Data Systems, government clients can not only track-and-trace products; they can have a deeper level of transparency and accountability.



**Last Call Analytics** provides world-leading retail data analytics tools for the alcohol and cannabis industries. Last Call's powerful sales data analytics and visualization platform that empowers frontline sales teams and managers to identify opportunities to improve sales and profitability.



**solo sciences** began by helping governments and brands protect users from counterfeit products. Their team of experts with CPG, NSA, CIA, and DoD backgrounds created an innovative, mobile-first approach. This led to the development of a cryptographically secure digital trust mark – a unique identifier on each package of every product.



**365 Cannabis** is exclusively dedicated to the cannabis industry, delivering a complete cannabis ERP solution with unparalleled service and support. 365 Cannabis has created a fully integrated seed-to-sale software that scales along with your business, with innovative features based on passion, experience, and a commitment to industry success.



# Using eCommerce to Drive Cannabis Sales

## By Rafael Sabbagh

Enterprise Account Executive, Akerna

Cannabis retailers have traditionally relied on brick-and-mortar stores to drive business and educate consumers on their products and services. However, recent years have brought a demand for new services. Online ordering, text message marketing, home delivery, curbside pickup, and even drive-thru windows are gaining prevalence and helping cannabis retailers grow sales.

The cannabis industry has been trending toward online and eCommerce for years. However, it is now more essential than ever. In fact, in the United States, eCommerce sales of cannabidiol (CBD) are forecast to increase from approximately \$2B USD in 2021 to more than \$6B USD by 2026. In case it wasn't clear, the future of cannabis is increasingly digital.

Below we'll outline various eCommerce strategies, including how to best use them and key considerations as you look to incorporate them into your cannabis business.

## Text Message Marketing

The new realities of how business is done require more direct, personalized, mobile, immediate, and secure communications that allow customers to engage dynamically without downloading apps. Text messaging stands out compared to other marketing channels when it comes to doing just that.

***The challenge many dispensaries face is they aren't quite sure how to best use this new channel to deliver a solid ROI and meet their goals. Here are a few ideas to effectively implement text marketing:***

- **Share Daily or Weekly Specials** - Texting is excellent for sharing product specials. You can share a "Daily Deal" each morning or "This Week's Specials" once a week. Try using an image to save on characters.
- **In-Store Deals and Flash Discounts** - Looking to get more people in the store? Send out offer codes that can only be redeemed by showing the text or keep them interested with flash discounts - "Catch 'em before it's too late!"
- **Order and Delivery Confirmations** - A drip campaign can deepen your relationship with your customers. This means communicating with them throughout the life cycle. Send them text updates to confirm their order or send them a "thank you" coupon after a purchase.



- **Share Your Online Menu** - Nowadays, it seems like everyone's got a menu on their site and is taking online orders. Sharing a link to your menu along with a brief update is a great way to stay engaged with your customers and shorten the time between repeat purchases.

## Texting Quick Facts

- Text marketing is incredibly effective, with SMS open rates as high as 98%
- 75% of consumers are comfortable receiving SMS messages from brands as long as they opted-in for it
- 64% of consumers think businesses should contact them via text messages more often
- 75% of consumers want to receive texts with special offers

## Online Ordering

Today's consumers have grown up in a world where any purchase is at their fingertips, just a click or a swipe away. They are starting to expect the same from their cannabis retail experience. Dispensaries looking to best serve those consumers need to evolve. Much like their counterparts in other industries, such as groceries, restaurants, and clothing, cannabis retailers need to offer a shopping experience as seamless and reliable as ordering a bag of oranges. One way to do this is by offering online ordering.

**Setting up online ordering may seem complicated, but it is easier than you may think. Here are a few tips to help you get started:**

- **Use High-Quality Images** - Don't worry if you don't have any product images. This is a common problem among many businesses, not just cannabis. However, humans are visual creatures. We can't touch, taste, or smell a product from your online store, making images all the more important. When first getting started, you can simply ask the manufacturer for any photos, take the pictures yourself, or try finding a public image on Google.
- **Keep it Simple** - The goal is to make the online shopping experience seamless and easy for your customers. The last thing you would want is to drive potential customers away because your categories were too confusing. That is why we recommend starting with industry-standard categories, such as beverages, edibles, concentrates, flowers, etc.
- **Maximize In-Store Personnel** - For online orders, in general, the best in-store setup is through a separate fulfillment station. It can be a different room or behind a window, and on each given shift, one or two of your employees are responsible for managing order fulfillment. As online orders come in and are printed out, one member of your fulfillment team takes an empty paper bag, puts the order receipt on it, and lines it up for the other team member to start packaging. It shouldn't be too different from your current setup for in-store order fulfillment.



## Customer Loyalty Programs

As the cannabis retail experience becomes more mainstream and competition becomes stiffer, one thing is clear – it is no longer just about dispensing cannabis. Retailers big and small have to distinguish themselves from their competition. Why should potential customers choose you over the dispensary down the street? Try implementing a customer loyalty program.

## Wholesale eCommerce Marketplace

The wholesale cannabis marketplace is fraught with challenges - from varying state market considerations to supply vs. demand issues to licensing requirements.

When it comes to success in the wholesale eCommerce marketplace, here are a few key considerations:

- **A Keen Understanding of Your Local Market Forces Will Go a Long Way** - This goes beyond some of the larger market factors, such as state regulations and who you can sell to. More specifically, in your market, which specific products are you going to be in a seller's market for or in a buyer's market.
- **Your Toolset Should Be Set Up to Help Your Back Office, Not Just Make More Sales** - There are a lot of tools out there that are more buyer-oriented (which is not a bad thing). However, you also want to utilize a set of tools that will make your life easier.
- **Start With Scalability in Mind for Long-Term Success** - This is an industry where things change quickly. It's essential to consider the big picture - your entire tech stack, not just what accounting platform or tracking system you are using, but also what marketing tools you will be using. And will this stack of tools be simple to maintain, train new people, and scale with my business as it grows?

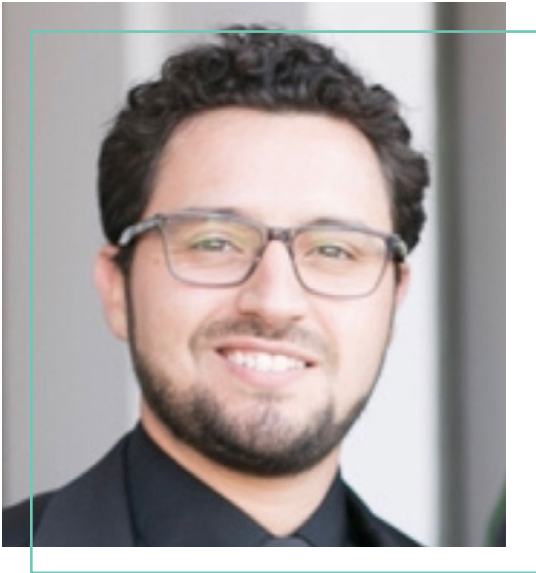
***“The tools that Akerna Connect provides our dispensary are game changing. Connect is a central component of our marketing strategy that drives our foot traffic daily. We trust that our text messages and promos reach our customers' phones when and how we expect them to, and the eCommerce tools help us provide a continuous brand experience after the customer leaves our building.”***

*- Natalia Albertorio Rivera, President, Emerald Cannabis Wellness Center*



## Optimize Your eCommerce Strategy with Akerna Connect

*Akerna Connect provides dispensaries and brands with a suite of marketing and eCommerce tools that integrate in real-time with seed-to-sale platforms to form a comprehensive technology strategy.*



### About the Author

Rafael Sabbagh is a veteran in the cannabis technology space and a subject matter expert in digital marketing for cannabis. He's been at the forefront of the cannabis tech industry since 2015, as the VP of one of the leading tech firms and as a government contractor for various key cannabis programs, such as those in Illinois, New York, and Puerto Rico.

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*Are you interested in learning more about how Akerna Connect can help your cannabis dispensary?*

**[Click here for a demo.](#)**



## QUICK HIT: CANNABIS LAWS IN THE US

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**18 states + D.C.**

Legalized adult-use of cannabis



**31 states + D.C.**

Decriminalized cannabis



**36 states + D.C.**

Legalized comprehensive use of medical cannabis

*Insights pulled from [Marijuana Policy Project](#) and are accurate as of the release of this report.*



## Conclusion

The cannabis industry continued to mature throughout 2021, making records while also facing new challenges. But throughout the year, we continued to move forward at full steam. We are so proud of everything that our clients, industry, and our own company accomplished - together.

Akerna serves the entire cannabis supply chain by providing compliance, data, enterprise software, regulatory software, seed-to-sale, track-and-trace, payments, marketing, eCommerce, and consulting to cannabis operators, governments, and brands. Our ecosystem allows cannabis operators to simplify their business growth and optimize their operations. With our 80+ integration partners, our functionality is at maximum capacity, allowing us to provide the full range of services that enhance cannabis businesses. The cannabis economy runs on Akerna.

Akerna's cannabis ecosystem is here for the cannabis industry's needs of today, tomorrow, and beyond. We are proud to be a part of the cannabis industry and excitedly anticipate what the future holds for our clients and industry. Grow with us.

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