CANNABIS INDUSTRY
MID-YEAR REVIEW
2022

AKERNA
CORP.

QUICK HIT: TOP SALES DAYS TO DATE

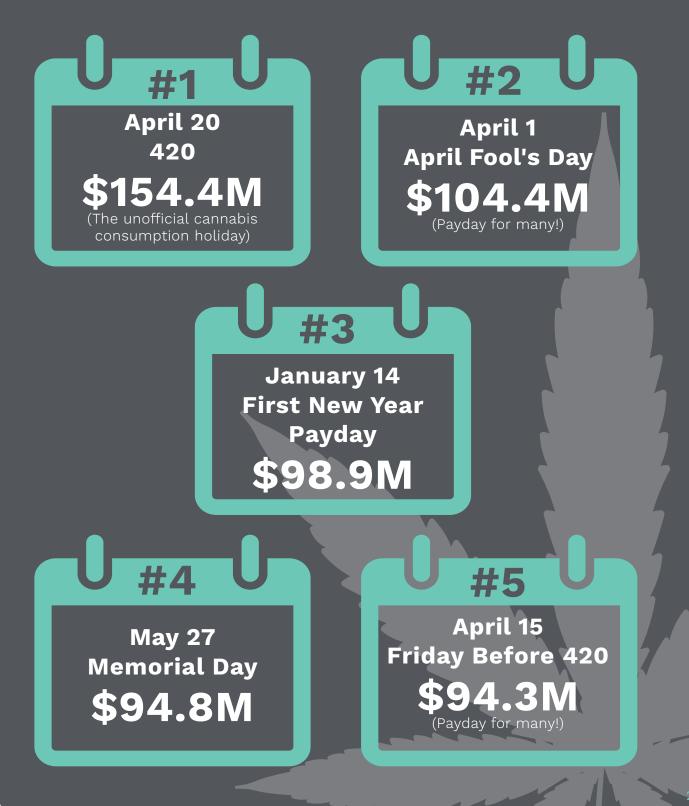Below are the top single sales days, so far, of 2022. While most correlate with nationally celebrated holidays in the United States, there is an increase in cannabis purchases on Fridays, payday for many.

#1
April 20
420
$154.4M
(The unofficial cannabis consumption holiday)

#2
April 1
April Fool's Day
$104.4M
(Payday for many!)

#3
January 14
First New Year Payday
$98.9M

#4
May 27
Memorial Day
$94.8M

#5
April 15
Friday Before 420
$94.3M
(Payday for many!)

Introduction

Welcome to our mid-year review of the cannabis industry.

As the technology ecosystem for cannabis, we are honored to serve as the system of record for much of the cannabis industry, which once again has seen so much movement in these first six months of the year - some positive, some negative, and everything in-between. We ourselves haven't been immune to the challenges, but along with our industry, we remain strong and resilient, focusing on the technology that will bring the most value to cannabis businesses.

Despite the variability of this emerging market and macroeconomic factors, the industry continues to move forward - this 4/20 was the largest grossing day in US cannabis sales ever, bringing in a total of $154.4 million in just one day. We are seeing the cannabis consumer pool continue to grow, partly due to increasingly reduced stigmas of the cannabis plant and largely due to new markets opening and previous ones expanding. Today, 77% of the US population lives in a state with legal cannabis. Newly launched operational markets in New Jersey and New Mexico each saw over $20 million in adult-use sales in just their first month of legal sales. This signals tax and job creation opportunities for lawmakers in non-legal states while alerting current and hopeful cannabis operators of business expansion opportunities.

As brands compete to become the first true household cannabis name, the competition to gain market share is alive and well. When cannabis operators begin to grow their businesses, typically via expansion or consolidation, they find that the simple software solutions they implemented to constrain costs while in startup just aren't robust enough to scale alongside their growth. They may find themselves considering purchasing additional software to fill gaps or exploring integration options with their current providers, but both of those options pose threats to seamless data connectivity, which can often be mission critical. When scaling, streamlining business should be top of mind – not spending numerous human hours integrating and learning disparate systems.

It is on us, the cannabis technology industry, to provide comprehensive and connected technology ecosystems to propel operators' growth goals and support the maturation of this industry.

We've built our Akerna ecosystem to meet these growing cannabis operators' needs, providing our clients with the industry's first true enterprise resource planning (ERP) solution that reduces the complexity of managing business and empowers operators in an increasingly competitive and challenging market.

It's a true honor to play a part in propelling this brilliant industry forward, today and in the future.

Sincerely,
Jessica Billingsley

Jessica Billingsley serves as Akerna's Chief Executive Officer. In June 2019 she became the first CEO of a cannabis ancillary company to be listed on Nasdaq. 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. In 2015, she was named as one of Fortune's Most Promising Female Entrepreneurs, in 2018, she was named one of Inc. Magazine's 100 Female Founders, and in 2019, she was named to Entrepreneur's inaugural list of 100 Powerful Women. Prior to MJ Freeway, Jessica earned her degree in Communications and Computer Science from the University of Georgia and later became CEO and founder of Zoco, a technology services firm with clients across the United States. With 20 years of technology and systems experience in rapidly scaling businesses, Jessica is a highly regarded executive in both the tech and cannabis space.

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QUICK HIT: CANNABIS CONTINUES RAPID GROWTH

YEAR OVER YEAR GROWTH
Global cannabis sales for 2022 will reach just over $35 billion, a jump of ~22% over 2021 sales of $29 billion.
– BDSA Cannabis Market Forecast 2022 Update

BILLIONS IN SALES
Total retail cannabis sales in the United States will reach—or surpass—$50 billion by 2026 .
– MJBizDaily 2022 Fact Book

NEW MARKETS, NEW OPPORTUNITIES
New Mexico and New Jersey, two new adult-use markets in 2022, recorded a combined total of $46.3 million in adult-use cannabis sales in just their first month of operations.
– Cannabis Business Times + New Cannabis Ventures

MERGERS & ACQUISITIONS
2021 was a record breaking year for cannabis M&A activity, with over 300 transactions totaling $10.1 billion in value, exceeding the combined M&A activity of both 2019 and 2020, which could accelerate further in 2022.
- Viridian Capital Advisors

GROWING USAGE
Consumers are using more cannabis a study found increasing incidence of reported daily/ multiple times daily use and drops in less frequent usage rates.
- Brightfield Getting High on Cannabis Insights

When is Your Business Ready for Accounting & Financials?

Business Management

By Dean Ditto
Chief Financial Officer, Akerna

During the startup and early growth phase of a company, what counts is getting the work done while keeping up with the myriad of challenges and changes that are bound to happen. Money and budgets are constrained, so you do what you can with the resources, people and systems available – all of which are usually in short supply. If you work in a regulated business, then you must meet the requirements in a cost-effective way. Doing this work without system tools can mean utilizing manual processes which are susceptible to error and breakdown due to employee turnover.

As companies grow and begin to generate predictable cash flows, installing infrastructure should be on the list of investments. Too often purchasing financial and reporting systems and hiring "back office" employees lags sales growth, creating the risk of not meeting accounting or regulatory requirements.

Organizations that are consistently successful in their brand and sales strategies, will grow revenues and cash flow. Many times, expansion plans include opening new geographic locations, creating new operating entities, acquiring businesses and, or vertical integration. The financial, regulatory and reporting tasks become exponentially more complicated due to inter-company movements, tracking multiple entities, consolidations, and asset tracking. Additionally, the volume of data to be tracked and safeguarded increases tremendously.

Failing to meet reporting requirements can bring a growing business to a grinding halt. So, how does a company scale in a way that balances cost, internal resources, and compliance?

Pathways vs Static Solutions

A good approach is to think of pathways vs. static solutions. A business growth plan should include the upgrade path for the systems, people, and reporting capabilities that keep a company compliant.

Spreadsheets with their database functionality paired with a basic bookkeeping software may suffice for start ups that don't have a lot of money, business activity, data, or multiple locations. In this situation, you need to attend to the basics and may only have one regulator to keep satisfied. Of course, in the cannabis business, point of sale systems are a must if the company has retail operations. You can get by with disparate systems by downloading (from one system) and uploading (to another system) data files to allow your systems to "talk" to each other. But this environment requires multiple manual processes, that inevitably break down as business volume increases. Unfortunately, the process knowledge is embedded in employees and partially lost when there is employee turnover.

The next phase of business maturity could involve increased business volume, expansion to multiple locations, brand expansion, and possibly creating (or buying) new operating entities. At this point, it becomes necessary for systems to automatically capture activities and book transactions, to manage the growing data tables, and allow for multiple business entities and consolidation of those entities. Inventory tracking and regulatory functionality must seamlessly pass data along from one part of the business workflow to the next. Processes and controls should be built into systems that include help functions and work aids to provide business continuity. Systems must have more "out of the box" reports tailored to meet regulatory requirements as well as allowing users to create custom reports.

When the business model grows it may include multiple geographies, several work teams, a number of successful brands, vertically integrated operations, and significant assets. The company will have to meet regulatory requirements in multiple jurisdictions and may have multiple systems as a result of business acquisitions. The accounting tasks outgrow manual processes and automated workflow is necessary. Robust data management and security functions are critical to the success of the business. Regardless of whether the systems are in the cloud or on premises, system integration is the most efficient and effective strategy. Just like a poor system strategy can stop a small company in its tracks, disparate systems and data can put a significant damper on a larger organizations ability to grow.

When contemplating the start of a new business, there is a lot to think about and most of it feels immediate. However, for the those aspiring to grow, it is worth the time to create a three year plan that includes pathways for systems, reporting and internal capabilities that will be the foundation for a growing enterprise.

About the Author

Dean is a dedicated and driven financial executive with extensive experience leading and elevating all aspects of the financial function, including SEC reporting, capital markets, cash management, business combinations and profit improvement initiatives. He is a trusted advisor to executive teams, the board of directors and shareholders.

Dean has served Fortune 50, mid-market, and early-stage companies in leadership positions, including twelve years in CFO roles. He began his career with a Big 4 accounting firm where he obtained his CPA certification and later earned an MBA from the Kelley School of Business, Indiana University, Bloomington, Indiana, graduating in the top ten students in his class. He holds a BA in Economics and Management from Albion College, Albion, Michigan, where he graduated magna cum laude.

QUICK HIT: SO, HOW WOULD MY BUSINESS USE ERP?

C-SUITE | LEADERSHIP
Oversee operations, real-time reporting, multi-location management, compliance; Use Power BI Analytics to make data-driven business decisions in the office and on the go.

FINANCE | ACCOUNTING
Perform bookkeeping, payments, invoicing, compliance.

CULTIVATION | PROCESSING | SUPPLY CHAIN
Oversee supply chain, traceability, planning, inventory, activity management, vendor management, compliance.

WAREHOUSE
Inventory management, location management, pricing, sales orders, compliance.

RETAIL STORE | DISPENSARY
Seamless fast checkout experience, cash management, loyalty promotions & discounts, loss & fraud prevention, compliance.

This is just the start. ERP software allows for businesses to manage oversee, streamline, plan, and report on their entire organization, across every role seamlessly in real-time.

Value of Mature Analytics for Your Retail Operations

Business Intelligence & Analytics

By David McCulluogh
Chief Technology Officer, Akerna

Cannabis has always been a step behind traditional industries when it comes to adopting technology. It's not all that surprising, given the decades long history of prohibition and the now fragmented, somewhat slow pace of legalization. When cannabis was still operating as an illicit market, old school operators felt technology left them open to risk. Instead, they relied on a system of manual processes, using spreadsheets and notebooks to keep track of their business.

In recent years, the industry and its feelings towards technology have changed. More than two-thirds of U.S. states have legalized medical cannabis, of those, 19 have legalized cannabis for recreational use. With new markets comes increased competition, evolving consumer preferences, and new state and local regulations. For your retail operations to keep pace, focusing on efficiency is the name of the game. One way for your organization to become more efficient is by embracing analytics.

Here we'll outline the value of analytics for your retail operations.

Standardize your data

Deciding to prioritize analytics is a great first step. But in order to take full advantage, you need to know how to get the most value from your data. There is certainly no lack of data available to you. However, the quality of that data often leaves much to be desired.

For it to truly make an impact, clean, consistent data is key. Having a standardized way of naming your products - from strain name, to dominance, to weight - provides a more holistic view of sales across your entire operation. As your business grows, having standardized naming conventions in place helps with employee onboarding, and makes it easier to get your new stores up and running.

Valuable consumer insights

Retail analytics provide actionable insights into your target customer behavior. For example, you can look at how certain products perform in one store vs. another. You can also look at category segments, and seasonal trends. This will help you further define your target audience and thus inform your marketing and sales strategy.

Set yourself up for growth

If you run a small to midsized business (SMB), it can be difficult to gain market share. In addition to competition with other small businesses, you are up against big brands with even bigger budgets. If your goal is to one day become one of the larger cannabis operators, you need to embrace analytics early. Multi-state operators (MSOs) pay attention to their data, even going as far as hiring an in-house data team. In an industry known for changing rapidly, MSOs with data teams are able to easily monitor how their entire business is performing, and quickly adapt to change.

As the industry matures, retail analytics will play an increasingly important role in the overall success of your operations. To get maximum results, cannabis operators need to improve the quality of their data, use it to build relationships with their customers, and embrace it early on to set themselves up for long-term growth. Those who do so will have a considerable advantage over the competition.

About the Author

Prior to being appointed CTO of Akerna, David McCullough served as Akerna's Executive Vice President of Product & Engineering for the last five years, overseeing all software development, development operations, quality assurance, automations, systems, and security operations. He has over 20 years of Software Engineering experience. Before joining Akerna, he was the CTO of StudentPublishing.com, where he actively managed the technical aspects of Student Publishing's sale to and systems integration with lulu.com. David has extensive government systems experience and was also a professor at New Mexico State University where he taught courses in data communications and networking.

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**

MARKET GROWTH

5.2%
average store growth in sales YOY for 2021 vs 2022

12.8%
growth in total market sales 2021 to 2022

RETAIL CLIENT GROWTH

16%
growth in transaction volume in Q1 of 2022

49%
growth in number of transactions in Q1 of 2022

ERP CLIENT GROWTH

6 months **27%**

12 months **61%**

18 months **76%**

24 months **151%**

As of June 2022, ERP clients on average experience significant growth within the first 24 months of implementation.

SOMETHING REFRESHING IS COMING SOON.

QUICK HIT: KEY PARTS OF AN ERP: WHAT THEY DO FOR YOU

A complete financial, inventory, and customer management system, with compliance and basic reporting of course, ERP offers a complete suit of business management tools.

FINANCE
The cornerstone of a true ERP, where all of your financial data is recorded throughtout your entire cannabis operation, from seed-to-sale and beyond.

DISTRIBUTION
Plan, track, and manage your inventory to ensure your supply chain is running at maximum efficiency.

SALES | CRM
Easily track, manage, and gain complete visibility of your sales, customers, and patients in a single solution.

Cannabis ERP solutions are specifically tailored to the challenges and requirements of the industry. Module-based solutionss allow cannabis businesses to use the system in its entirety or start with the basics and consume operational modules individually as they scale.

CULTIVATION
Forecast, plan, track, and register your plats throught your cultivation process with all of the tools you need from forecasting to QA/QC all in one place.

PROCESSING
From simple to full-blown MRP and everything in-between, leverage a proven manufacturing module equipped with industry-specific production features.

RETAIL
Specifically designed for dispensaries, integrated POS enables users to manage and fulfill patient and recreational orders, all tied back to real-time financials and inventory.

Conclusion

Despite facing ongoing challenges and navigating constant change, the cannabis industry continues to mature. Businesses are growing and expanding, consumers are breaking retail records, more states, countries, and operators are entering the space, and the SAFE banking Act seems to have enough support in the Senate to break the 60-vote threshold. We are so proud of everything that our clients, industry, and our own company persevered through and 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. With our 80+ integration partners, our functionality is at unparalleled, allowing us to provide the full range of services that enhance cannabis businesses, including inventory management, online ordering, and digital menus, but that only scratches the surface. We proudly offer the most comprehensive portfolio of technology solutions to the resilient cannabis industry.

We stand ready to grow with our global cannabis community, excitedly anticipating what the future holds. We look forward to providing a follow-up report in early 2023 on the second half of this year.

Sources:
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