

Hemp / CBD

Evolving Marketplace Overview

Naturally Boulder Education Event

April 18, 2019

Naturally

BOULDER



SUMMIT
VENTURE MANAGEMENT

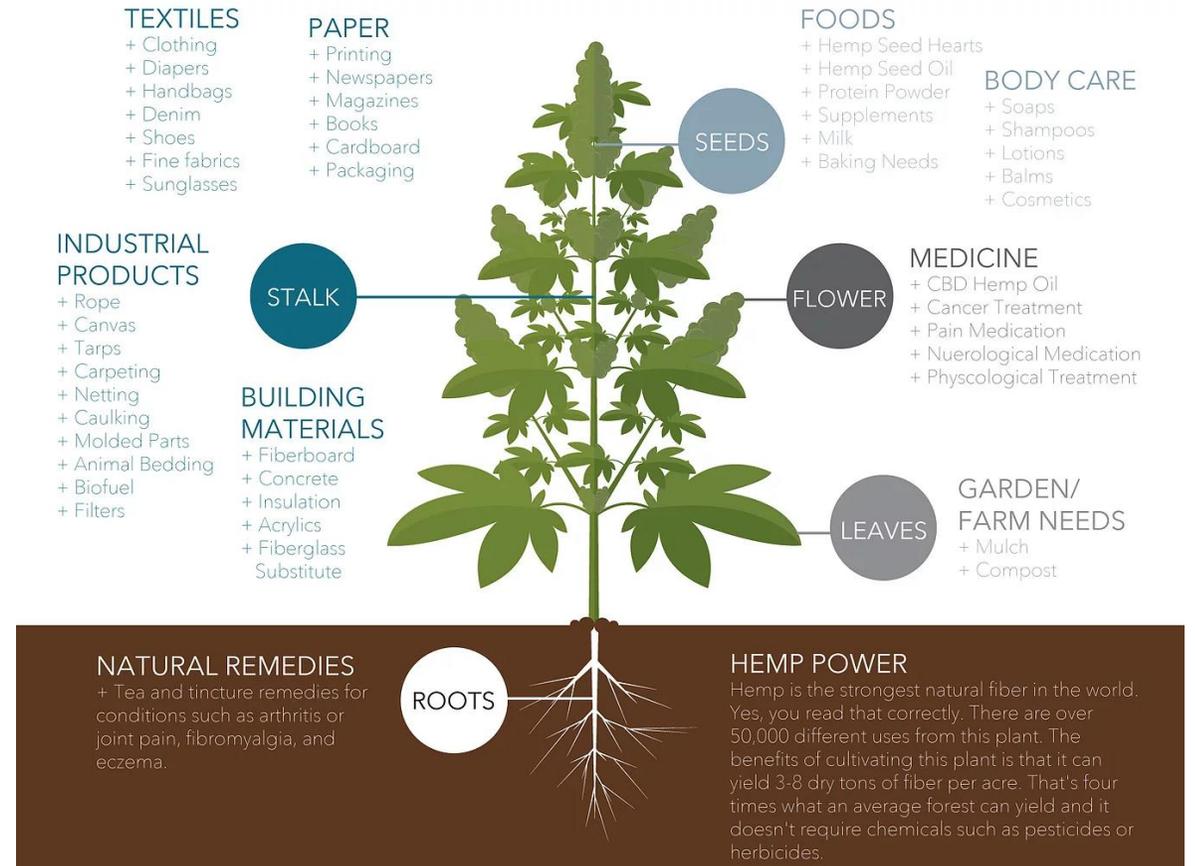
Brief Glossary

1. **Cannabis Sativa** : Hemp and Marijuana are same genus and species
2. **Different Cultivars** : Genetics selected for desired attributes,
 - Fiber (shiv and hurd), Seeds (seed oil, hemp hearts), flower (CBD, THC)
3. **Cannabinoids**: distinctive compounds in hemp (104-112 identified)
4. **CBD**: Celebrity cannabinoid – “Cannabidiol”
5. **Endo Cannabinoid Receptors**: two types founds throughout human body
6. **Plant Bio-Mass**: Unrefined plant after harvest
7. **Extraction**: Separate bio-mass from crude oil (with Co2, Ethanol, Lipid)
8. **Winterization**: Separate waxes and lipids
9. **Distillation**: Refinement and isolation of specific compounds such as CBD
10. **Isolate**: Distilled and isolated cannabinoid (only legal in Rx)
11. **Terpenes and Flavonoids**: Polyphenolic molecules that influence sensory and nutritional attributes -- as well as cell-signaling
12. **Full-Spectrum**: Refined oil in its natural habit



Hemp Many Uses & Applications

- There are an extraordinarily broad set of uses and applications for parts of the hemp plant
- With legal restrictions on research, deep exploration of the many cannabinoids has been quite limited
- Some historical uses, while effective, are of doubtful economical value at this point in time
- China: Principal use-case is textiles
- Europe: Principle use-cases are industrial
- U.S.: CBD yield is dominant objective in cultivar choice and economic yield



2018 Farm Bill: Summary

- Hemp now legally differentiated from marijuana (<0.3% THC), removed from the Controlled Substances Act Schedule 1 and no longer subject to DEA oversight
- Hemp's legal status allows interstate commerce, banking, federal crop insurance and other business services along with other benefits of legitimacy
- Hulled hemp seeds, hemp seed protein and hemp seed oil classified by FDA as Generally Regarded as Safe (GRAS Notification)

Key requirements for states to cultivate hemp under 2018 Farm Bill:

1. States must submit plan to USDA for approval.
2. States/tribes have authority to adopt more restrictive parameters on hemp production than federal policies.
3. Hemp cultivators may apply to the USDA directly if their state does not have a license.
4. Cultivation only legal if derived from a supplier's compliance with licensing and other regulations.
5. USDA Secretary can audit state programs.



2018 Farm Bill: Regulatory Response

The FDA letter, issued after the Farm Bill was signed, stated that it is still illegal to sell a food or dietary supplement that contains CBD in interstate commerce.

“Until it is approved by the FDA, using CBD as an ingredient in foods and supplements results in risks that include regulatory enforcement and exposure to liability in civil lawsuits.” –*National Law Review*

However, the FDA proposed a stakeholder meeting to gather input on:

“The lawful pathways by which products containing cannabis or cannabis-derived compounds can be marketed, and how we can make these legal pathways more predictable and efficient.” **Scheduled for MAY 31, 2019**

The letter ended on an optimistic note:

“We’re committed to pursuing an efficient regulatory framework for allowing product developers that meet the requirements under our authorities to lawfully market these types of products.”

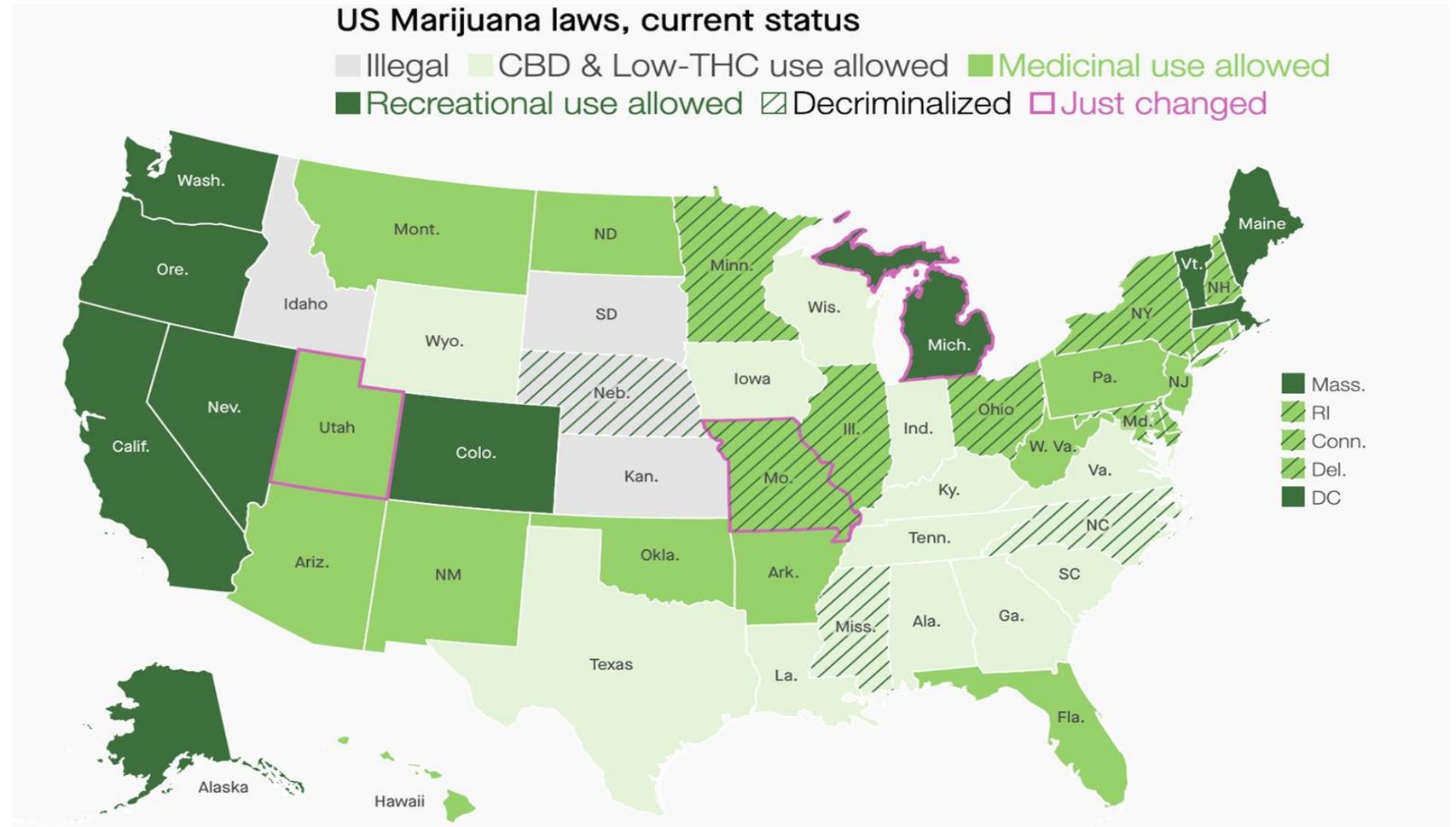
USDA:

Rule making process designed to provide guidance in advance of 2020 planting season



Regulation and Enforcement: A State-by-state Patchwork

- Regulatory uncertainty remains a barrier to market participation
- Commercial pressure will increase to resolve, clarify, and harmonize regulation
- Enforcement actions largely exercised by local authorities and Health Departments
- Governor Polis committed to Colorado leadership
- Many of the market leaders are in Colorado



Source: Quartz (QZ.com)



CPG Investment Activity



\$4B (38% stake)
→



\$1.8B (45% stake)
→



\$100M JV
→



\$318M Acquisition
→



\$53M (57.5% stake)
→



Reportedly in talks with Aurora
Talent outflow to CW
→



\$65M 2018 Sales
\$1.7B Valuation



Who is Moving on Hemp and CBD?



Wrangler



Unilever



Walgreens
Trusted since 1901™



Need to Harmonize Standards:

Legislative Advocacy Groups:



- Formed the US Hemp “Authority” certification process. Driven by a handful of CBD companies and law firms without significant input from the Herbal and Natural Product Industries
- Some friction with more established natural products and botanical organizations

Contact: Jonathan Miller



- Advocacy organization dedicated to enabling all aspects of commercial hemp agriculture and free trade in the U.S. Led by Steenstra, Dr. Bronner, and leading attorney for Hoban Law Group

Contact: Eric Steenstra



- Longtime industry pioneer (HIA v DIA 2004) previously led by Tim Gordon. Working to advance the hemp economy and educate the market for the benefit of our members, the public, and the planet.

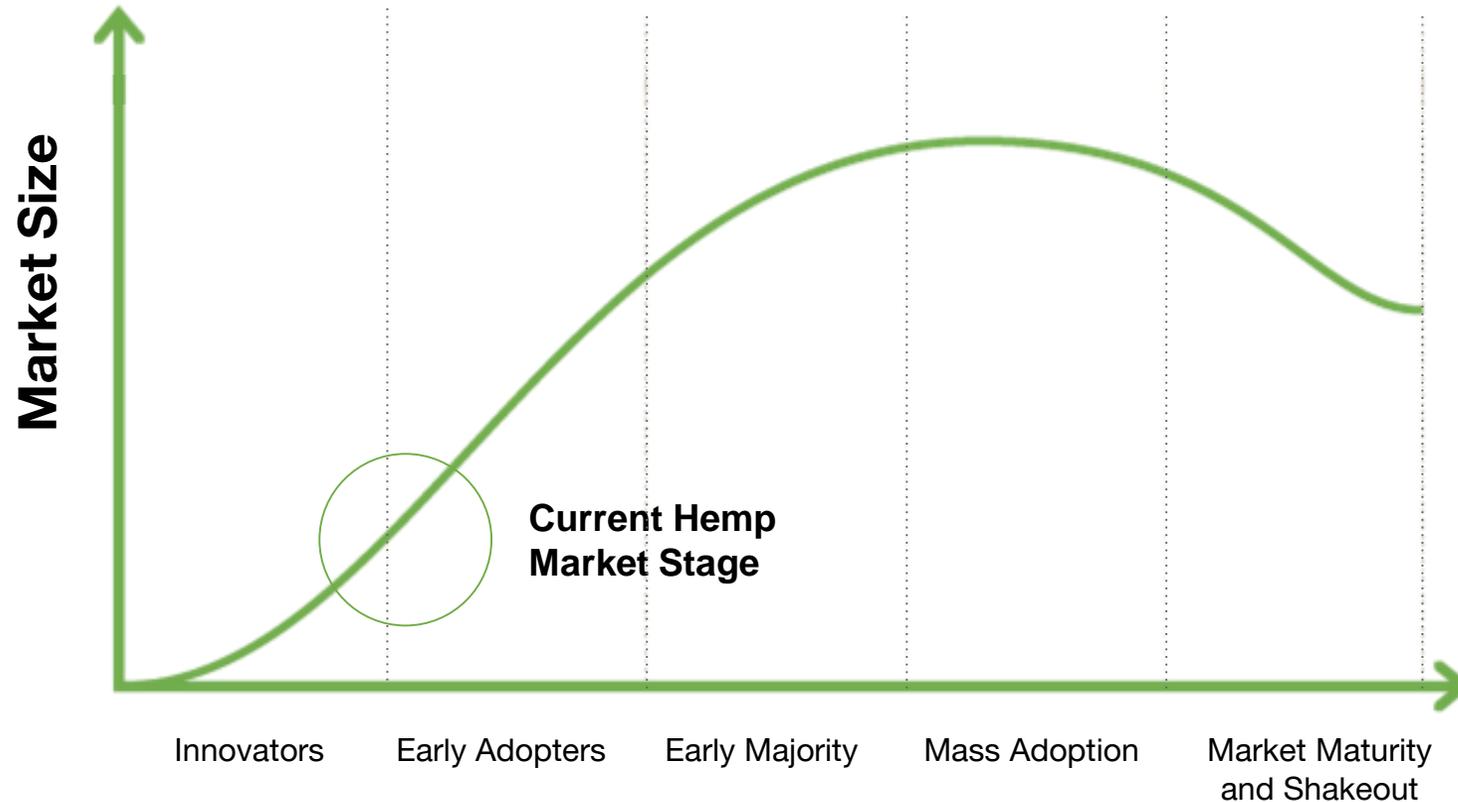
Contact: Tim Gordon



Potential Hemp Market Life Cycle:

Increasing Demand and Supply

Hemp Market Lifestyle Scenario



COWEN
AND COMPANY

\$16B U.S. CBD
Market by 2025



Naturally Boulder Caveat:



Your Panelists Tonight:



John Roulac
CEO RE: Botanicals



Todd Runestad
Senior Editor
Ingredients /Supplements
New Hope Network



Scott Hansen
Director of Quality
Botanacor



Annie Brown
Director of Development
Rodale Institute



John Grubb
VP Naturally Boulder
Summit Venture Management

