

SUCCESS STORY

APHRIA INC. / AMPLE ORGANICS



Strict Regulations Create Need for Real-time Visibility, Data Integrity and Regulatory Compliance

APHRIA INC., A CANADIAN-BASED MEDICAL MARIJUANA PRODUCER, AND AMPLE ORGANICS ALONG WITH ZEBRA TECHNOLOGIES WORK TOGETHER TO CREATE A SEAMLESS, END-TO-END SOLUTION THAT SAVES TIME, MONEY AND RESOURCES

Epilepsy, depression, Parkinson's disease, arthritis, and brain injuries are just five medical conditions out of dozens that Health Canada says benefit from medical marijuana. In some of these cases, it can be the difference between life and death. When the Canadian government authorized the use of medical marijuana, it needed strict regulations to ensure compliance among citizens, producers, and law enforcement. In turn, medical marijuana producers know there is no room for error when making critical business decisions around data and regulatory compliance.

Challenge

Aphria is one of Canada's leading licensed medical marijuana producers. Health Canada — the Canadian Government's public health department — regulates the Canadian medical marijuana industry under the "Access to Cannabis for Medical Purposes Regulations" (ACMPR), formerly known as the "Marijuana for Medical Purposes Regulations" (MMPR). These strict regulations put pressure on licensed producers to adhere to stringent security, manufacturing, record-keeping, and quality standards. Every licensed producer must take proper measures to ensure they track every aspect of the operation for mandated and frequent compliance reporting and inspection. If licensed producers fail to do this, they risk losing their license to cultivate and sell medical marijuana.

SUMMARY**Customer**Aphria Inc.
Ontario, Canada**Partner**Ample Organics
Toronto, Ontario, Canada**Industry**Healthcare
Licensed Medical Marijuana**Challenge**

- Regulatory compliance, inspection, reporting
- Manufacturing, record-keeping and quality standards
- Data integrity

Solution

- MC3200 Mobile Computer
- ZT220 Industrial Printer
- GK420D and TLP2824+ Desktop Label Printers
- ZXP Series 1 Card Printer for Patient IDs
- Ample Organics ERP Seed-to-Sale System

Results

- Better data integrity — real-time data at all times
- Better tracking of inventory levels
- Improved worker efficiency
- Checks and balances for regulatory compliance

SUCCESS STORY

APHRIA INC. / AMPLE ORGANICS

Aphria needed a way to track marijuana and marijuana-derived products from seed all the way to patient delivery, essentially beginning to end. Initially, Aphria tracked its operations with pen, paper and Microsoft Excel® spreadsheets. The system lacked efficiency and added tremendous risk for errors. Aphria knew this would become problematic since Health Canada has high regulatory standards and conducts frequent facility inspections, often monthly.

"Health Canada pulls a patient record and asks us to show all of the paperwork including where the inventory came from and where the plants came from. In the end, they need to see the paper trail," Aphria's Co-Chair and Founder John Cervini said.

In the end, Aphria needed a way to ensure data integrity and regulatory compliance as well as improve worker efficiency for its large and rapidly expanding medical marijuana growing operation.

Solution

Aphria decided to implement the Ample Organics enterprise resource planning (ERP) seed-to-sale system which utilizes Zebra® hardware for a complete end-to-end solution allowing easier compliance with the Canadian regulations. The end-to-end solution encompasses inventory control and traceability, customer relationship management, supply chain logistics, electronic payment processing, and secure e-commerce. Ample Organics was founded in 2014 and has rapidly become the Canadian market leader for seed-to-sale software. Today, Ample Organics is the most widely adopted cannabis software platform in Canada and has begun to explore expansion opportunities in new jurisdictions around the world.

When it came to selecting a hardware partner, Zebra Technologies was the natural fit for Ample Organics.



Zebra barcodes are the starting point for the plant-to-patient marijuana journey. Each plant receives its own barcode for identification through the propagation, cultivation, and harvesting process. Once the plant is harvested, the barcode follows the plant material through the entire facility as it is trimmed, dried, packaged, and lab-tested. The Ample Organics seed-to-sale system, along with the Zebra hardware, keeps a detailed record and history of every single gram in real-time.

The system functions with the help of Zebra products like the MC3200™ mobile computer, ZT220™ industrial printer, GK420D™ and TLP2824+™ label printers, and ZXP Series 1 card printer for patient IDs. When it came to selecting a hardware partner, Zebra Technologies was the natural fit for Ample Organics. John Prentice, CEO of Ample Organics, said, "Selecting Zebra came down to reliability, durability, and the ability to deliver a true enterprise solution from the ground up."

"Selecting Zebra came down to reliability, durability, and the ability to deliver a true enterprise solution from the ground up."

**John Prentice,
CEO of Ample
Organics**

SUCCESS STORY

APHRIA INC. / AMPLE ORGANICS

"We needed enterprise-grade equipment that could stand up to the rigors of a greenhouse where you are dealing with dirt, water, and a concrete floor," Prentice said. "We knew we needed to quickly, efficiently generate all of these inventory tags and barcodes to scan contextually and save on efficiencies for employees. The only way to do that was with Zebra Technologies. We never looked anywhere else. We wouldn't have the industry-leading software solution we have without Zebra standing behind us."

When a patient order comes in through customer service or online via the Ample Organics eCommerce portal, the Zebra MC3200 mobile computers help employees find, pick, label, and pack each order efficiently while automating many compliance related tasks.

"They are picking orders right off the MC3200 mobile computer in our bottle inventory and getting that prescription ready to dispense to the patient," Cervini said. "When they are filling those bottles, they are inputting that material

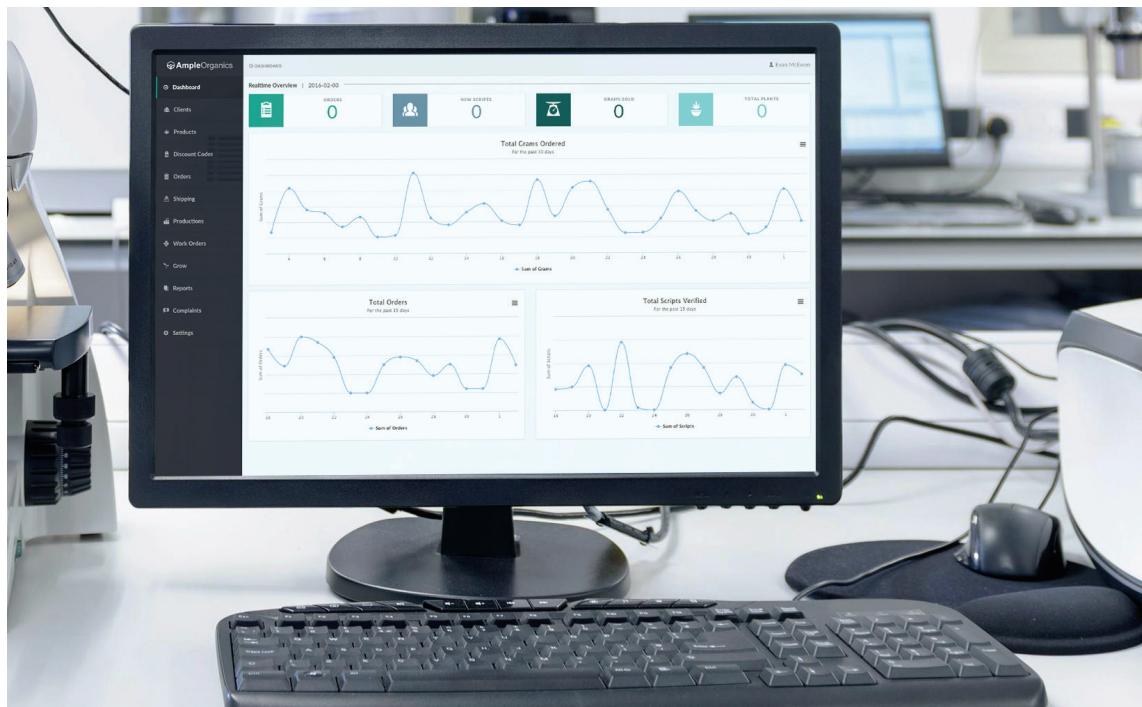
into the MC3200 and a label is printed to go on the bottle to make sure it's all tied together. It works full-circle on everything it touches and it is extremely accurate."

All of the data is collected and stored in real-time within the Ample Organics system. This is essential since Health Canada performs frequent inspections on licensed producers. With the data collected in the Ample Organics system using the Zebra MC3200 mobile computer along with its label and card printers, Aphria is confident when these targeted and random inspections occur.

"The overall efficiency has been very good," Cervini said. "As the call center puts an order in or someone submits an order online, the orders come up on the MC3200 immediately. It's very easy for staff to locate and fill that order as well. They see inventory levels right away which helps with production planning. There are a lot of visibility and efficiency gains that were inherent in the implementation of this solution."

"We knew we needed to quickly, efficiently generate all of these inventory tags and barcodes to scan contextually and save on efficiencies for employees. The only way to do that was with Zebra Technologies."

**John Prentice,
CEO of Ample
Organics**



SUCCESS STORY

APHRIA INC. / AMPLE ORGANICS



Results

With Ample and Zebra, Aphria achieved data integrity, improved worker efficiency and ensured regulatory compliance. Aphria no longer needs to worry about regulatory compliance because they track inventory in real-time.

"We have real-time data regarding our inventory including where our product is and the status of all parts of our inventory in real time," Cervini said. "It allows us to have that visibility...a real-time snapshot of our business at any given time so we can make better business decisions."

The Ample Organics ERP software coupled with the Zebra hardware created a system of checks and balances through the entire marijuana journey: seed to plant to harvest

to patient. It allows Aphria to be confident in its tracking system for record keeping while reducing the burden of compliance and improving operational efficiency.

Aphria considers the Ample Organics and Zebra solution the "backbone" of its operation. It is also one of the reasons behind future expansion.

"We have 45,000 square feet of marijuana growing, and we're expanding to 100,000 square feet," Cervini said. "In the next couple years, we expect to expand to 200,000 or 300,000 square feet. We are in a very high growth market, and we have a deep commitment to automating our processes to maximize results."

For more information, visit www.zebra.com



NA and Corporate Headquarters
+1 800 423 0442
inquiry4@zebra.com

Asia-Pacific Headquarters
+65 6858 0722
contact.apac@zebra.com

EMEA Headquarters
zebra.com/locations
mseurope@zebra.com

Latin America Headquarters
+1 847 955 2283
la.contactme@zebra.com