

Wyoming Liquor Division

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Tourism and population growth drives Wyoming Liquor Division to upgrade alcohol distribution services with Knighted order fulfillment solution



The Wyoming Liquor Division ships more than 3,000 cases per day from its Cheyenne distribution center.

A land of mountains, mesas, cowboys and rodeos, Wyoming is America’s tenth largest state by land area – stretching from Cheyenne in the southeastern corner to the magnificence of the Grand Tetons and Yellowstone in the northwest. There’s a lot to see and a lot to do, resulting in steady increases in both the overall population and visitors to the state’s attractions. Keeping wine and spirits flowing to restaurants, hotels, bars and liquor stores across the state is an important part of satisfying tourists and ensuring the local watering holes stay well-stocked.

Wholesale alcohol distribution operations in a control state

Wyoming is one of 18 alcoholic beverage control (ABC) states in the U.S., in which state governments exercise jurisdiction over the sale of some or all categories of alcoholic beverages. Unlike many other ABC states that operate government-controlled retail outlets, the Wyoming Liquor Division,



Knighted's Datria Voice integrates with the legacy WMS to provide supervisors with real-time order progress updates.

a subsidiary agency of the Department of Revenue, is solely responsible for wholesale distribution of wine and spirits to 1,478 state-licensed retailers.

Dan Noble, director of the Wyoming Department of Revenue, oversees Liquor Division operations to ensure reliable, efficient services to the state's retailers in accordance with state law.

"We want to be able to offer the same level of service to our citizens and visitors that you could find in a place like New York City – without raising costs," Noble said. "We have a sparsely populated state, but our retailers need access to the same products available in large metropolitan areas."

The Cowboy State's natural beauty and low taxes, combined with marketing efforts of the Wyoming Office of Tourism, have attracted more visitors and more permanent residents. As a result, liquor sales have grown steadily over the last five years, with net sales of \$93.8 million for the 2013 fiscal year.

Servicing increased demand drives DC expansion

Wyoming Liquor Division's legacy 100,000-square-foot distribution center (DC) had seven shipping and receiving docks and warehoused 1,800 beverage SKUs. But as the demand for a larger inventory of popular items guaranteed for overnight delivery increased and its special order and catalog expanded, the DC encountered putaway and storage limitations. Its dated manual paper pick order fulfillment system was unable to adapt to the shifted retailer preference from



Wireless devices and Bluetooth headsets enable hands-free operation with step-by-step picking instructions to guide orders to completion.

full cases or pallet loads to more complex split-case orders. The operation raised customer service concerns including limited product availability, increased out-of-stocks and risking earlier cut-off times to place orders.

To manage complex orders and ensure high-quality customer service for years to come, the Wyoming Liquor Division required a new facility to streamline operations with a smart order fulfillment solution and accommodate more shipments with expanded receiving operations and inventory storage. In 2012, the Wyoming Liquor Division upgraded its entire operation with the construction of a state-of-the-art 145,000-square-foot facility. The new Cheyenne DC offers 45,000 additional square feet of work and storage space, a 15,000-square-foot administration space and 10 extra loading docks to allow shipping and receiving operations to function efficiently in separate designated areas. The new facility stocks 200 more SKUs for overnight delivery than the old warehouse and carries 32,000 SKUs total, including special orders.

Searching for an automated order fulfillment solution

With storage no longer an issue, Greg Cook, administrator, Wyoming Liquor Division, led the search for a cost-effective solution to improve picking efficiency and control expanded inventory, while maintaining order accuracy.

“We were facing a higher volume, a changing product mix and increasing SKUs across the board. To cover all these areas, we turned to voice picking,” Cook said.



Datria Voice manages complex split-case order picking on the 300-foot bottle picking conveyor line.

After extensive research and visits to operations in other states, Cook's team selected the Datria[®] Voice solution from Knighted[®] for its proven track record, easy employee adoption and rapid return on investment.

Knighted's voice solution offered pick-by-voice order fulfillment featuring hands-free, step-by-step picking instruction and real-time order management. Rugged, yet lightweight wireless phones and Bluetooth headsets replaced paper pick lists, and enabled the Warehouse Management System (WMS) to direct workers to each item location for accurate item picking, improved efficiency and accuracy.

Voice picking for full- and split-case orders

The Datria Voice system is configured to manage both full- and split-case order picking. Employees use wireless devices to connect to the WMS and begin a back and forth dialogue, verifying completion each step of the way until the order is concluded. After directing the picking sequence to completion, the Datria system automatically updates the order status in the WMS. Completed orders are then staged for overnight delivery to customers.

On the new 300-foot split-case bottle picking conveyor line, Datria Voice sorts each pick face and conveyor section into logical picking zones. Multiple employees are assigned to specific bottle pick locations and voice-directed to fill their portion

of each order as it passes through their zone. This collaborative picking approach enables 16 employees to pick 26 orders simultaneously.

“With Knighted’s voice solution, all we need to do is listen and the system will tell us where to go, what to do and how much to pick,” said Scott Workman, Wyoming Liquor Division operations manager. “Our picking process has improved dramatically.”

According to Workman, training pickers to use the voice technology took very little time, even for workers unfamiliar with mobile devices. Furthermore, with the hands-free voice system in place, employees can focus on picking and safely navigate the warehouse without constantly looking down at paper pick lists. The simple training process also helps the facility quickly integrate seasonal labor into picking operations during peak seasons.

“The training process takes no more than 10 to 15 minutes,” Workman said. “Once the procedures and steps are explained, it’s an extremely simple process.”

Knighted automated order management and WMS integration

Knighted engineers worked with the Wyoming Liquor Division IT staff to integrate the Datria Voice system with the legacy warehouse management system (WMS). The WMS shares order information with Datria, which in turn allows supervisors to get status updates and assign orders to the bottle line or rack picking.

As pickers execute orders on the floor, a dashboard provides supervisors with real-time visibility into order processes, individual picker efficiency, time remaining to complete scheduled orders and many other valuable tools. Supervisors may also assist workers by texting messages to headsets, calling specific workers or providing extra assistance to active transactions, as needed.

Datria Voice configurable staging abilities:

- Enables supervisors to control what orders are released to the floor
- Automatically tracks order progress until resolution and updates WMS
- Provides specific order completion status, ex. the order is at dock door five, ready for loading





Wyoming Liquor Division offers overnight delivery for more than 2,000 SKUs and delivers a total catalog of 32,000 SKUs including special orders.

“We found Knighted’s solution to be far superior to other options we considered,” said Scott Shepherd, IT administrator, Wyoming Liquor Division. “Our workers perceive the Datria Voice system to be easy to learn and use. Whenever we had a problem they had an immediate response with options and solutions - the Knighted team also excelled at integrating voice processes with our existing database.”

Top-shelf results

With the installation complete, Datria Voice transformed the workflow in the DC. Employees now pick two, three or four orders at a time. The new system handles split-case fulfillment with ease and retailers can place a multi-SKU overnight delivery order with confidence that they will receive it on time.

“I would estimate that we’ve gained between an hour to an hour and a half per day getting our product ready and out the door,” said Workman. “The benefits from the Knighted solution include less fatigue, less breakage from handling individual bottles, and easy training for seasonal personnel that we bring in to help get the job done.”

The Wyoming Liquor Division calculated that a 10 percent productivity improvement would justify their investment. Yet through improved fulfillment accuracy and speed, they easily exceeded their goal in the first year. The new DC operates at increased efficiency, distributing more than 880,000 cases of spirits and wine in 2012 and reports increased profits with \$11.7 million generated for the state’s General Fund on net sales of \$93.8 million.

The increased order fulfillment capability allows Wyoming Liquor to ship more than 3,000 full cases and 12,000 bottles per day. This represents a 15 percent productivity increase over the legacy process, with an order accuracy rate of 99.9 percent.

Using Knighted Datria Voice, employees pick orders faster with fewer errors, and supervisors have tighter control on inventory and order status. Orders are completed sooner each day, avoiding overtime costs and enabling advance preparation for the next morning's work. All orders received before noon are shipped the same day, guaranteeing next-day delivery to retailers across the state.

"Our main goal was to implement a system that would allow us to get the product out the door fast and accurately," said Workman. "We needed a technology that would help us, and Knighted Datria Voice was a perfect fit."



Scott Workman, warehouse operations manager, Wyoming Liquor Division, manages receiving and shipping operations to facilitate next-day delivery to retailers across the state.

"The Liquor Division has been very pleased with the Knighted Datria Voice picking system," said Cook. "We would highly recommend them to another control state or anyone in the private industry."

Future plans:

- Migrate special order fulfillment from scan guns and pick lists to voice system
- Integrate voice system into receiving and putaway processes
- Use voice system with shipping vendors for more efficient order staging and loading



About Knighted

Knighted, an Intelligrated Company (www.knightedcs.com), is a leading single-source provider of fulfillment execution solutions, with a comprehensive suite of warehouse management (WMS), warehouse control (WCS), order fulfillment, labor management and supply chain business intelligence software. Knighted software solutions deliver optimized execution of fulfillment operations through adaptive, task-driven workflows and real-time, constant analysis of inventory, labor, process and equipment information. Knighted combines unique software and order picking innovations with proven customer support to provide scalable, modular solutions for single-facility operations and multi-site enterprises worldwide.

Headquartered in Elmsford, N.Y., Knighted serves the retail, e-commerce, 3PL, consumer goods and wholesale industries. Knighted is a wholly-owned subsidiary of Intelligrated (www.intelligrated.com), a leading international automated material handling solutions provider.

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