



RFID CASE STUDY: Tavern Restaurant Group

In collaboration with



Brewing Up Better Sales and Service

Customer:

The Tavern Restaurant Group operates fifteen restaurants in the Midwest and southern United States, including ten highly successful, English-pub-themed restaurants they call, "The Pub." With a wait staff clad in kilts, The Pub offers a simple menu of classic pub fare, along with a wide variety of beers from the British Isles, Europe and the USA. The company prides itself on being an innovator in the industry—providing a unique experience while maintaining a sense of authenticity.

The Pub concept became successful in part because of the high frequency of return customers. Restaurant managers encourage customer loyalty with music acts, food specials, fun activities such as The Pub's Quiz Night (trivia contests that have avid followers), and unique restaurant features like individual tap tables with beer taps that are activated by the wait staff, exclusively for the party seated at the table.

Challenge:

In November 2010, the Tavern Restaurant Group opened their latest pub, this time in Tampa, Florida. Opening a restaurant is always challenging. Add a crowded market and depressed economy to the mix, and you have the situation that faced these restaurateurs when they decided to expand into Tampa.

Given the size of the restaurant space, along with its two-story configuration, the Tampa location provided the group with an opportunity to do something different. Initially, they thought to provide a number of tap tables on the second floor to create a space that could be used for private, or semi-private parties.

In investigating the latest tap table options, the Tavern Restaurant Group was introduced to DraftServ Technologies by Atlanta restaurateur, Jose Hevia. In addition to installing a beer management system for Jose, DraftServ had created a very popular beer wall at his Cheeky restaurant that allows

customers to pour their own beer in a responsible and controlled manner.

Impressed by the system and intrigued by the possibility of creating a unique customer experience while gaining better inventory monitoring, the Tavern Restaurant Group contracted DraftServ to install a whole-restaurant beer management system and beer wall for its Tampa store. Because of the large area available, they asked for a system that could provide 20 pour-your-own taps.

How it Works

Draft Beer Delivery Control and Management

Restaurant draft beer delivery systems all have similar characteristics. Beer kegs are stored in refrigerated rooms and the beer is delivered throughout the restaurants via glycol-cooled lines so that customers receive it very cold. Although the final tap appears to control beer delivery, there



is typically at least one other valve on each line. DraftServ uses a high-quality, industrial controller to manage these backroom valves, tying their operation to a backroom server accessible via the Internet. In this manner, they can monitor every ounce of beer going to every tap in a restaurant 24/7 without being on site.

In the case of The Pub, DraftServ monitors 52 regular beer taps, mostly in the downstairs bar area, in addition to 20 at the upstairs beer wall.

A New Draft Beer Delivery Option

Having perfected the management of beer delivery, DraftServ turned to RFID to add a new feature: a pour-your-own beer delivery system that allowed customers to access beer in a responsible and controlled manner. After proving they are of age, customers receive a beer card from the wait staff. The card allows the customer to walk up to a wall of beer taps, wave the card and access any of the beers on a tap tower, paying for each ounce they pour. If they only want to try an ounce, they may. If they are slow drinkers and want to pour a half glass, then come back for more so their beer doesn't warm up, they can—no wait staff required, but only up to the limit preset by the wait staff. That's where the responsible and controlled manner comes into play.

The Technology

To make this system work, DraftServ relied on Impinj® RFID technology. Each beer card contains a Monza® RFID tag chip with a unique tag identification number. At The Pub, Tampa, the wait staff use Apple iPod touch devices to access the backroom computer server via a wireless network. After verifying a customer's age, the waiter opens a session, assigns the reusable card's identification number to that customer's tab, allocates a beer-ounce allowance (e.g., 40 ounces for one person, 80 for a two-party group, etc.) and closes out the session.



With high-performance technology hidden behind an elegant exterior, The Pub's draft wall appeals to a wide demographic.

The customer takes the RFID-enabled card up to the beer wall, where four Apple iPads have been mounted inside wooden frames. These iPad screens initially display the logos of the five beers that station controls. If a customer taps on one of the logos, more information about that beer will appear, such as its flavor notes, providing an enriched and educational consumer experience.



Framed Apple iPads provide customers with information about the beer on that tower, as well as hide Impinj Mini-Guardrail antennas.

The bottom of each wooden frame covers an Impinj Mini-Guardrail antenna. These antennas connect to an Impinj Speedway® Revolution RFID reader located underneath the beer counter. Customers wave their RFID card in front of the iPad screen, and the Speedway reader reads the card number via the Mini-Guardrail antenna. It communicates with the backroom computer server to indicate the card number read. The server uses the card number to access the customer's information (e.g., name and associated tab) that had been previously linked to the card via the wait staff's session, and sends the information to the iPad, where the screen displays a welcome message that includes the customer's name.

The customer has 20 seconds to pour any of the five beer types associated with that tower into a five-ounce "taster" glass, or a ten- or twenty-ounce glass. However, they don't have to fill any glass. They can pour as little as an ounce of beer to try it before committing to a full glass. If a customer reaches their total ounces limit, the beer stops pouring, and only a visit to the wait staff (who evaluates the customer's sobriety level) can start it flowing again.

In this manner, the visible taps appear to only operate for the holder of an RFID-enabled card. In reality, it's the backroom valves that the industrial controller uses to control the flow of beer.

The Impinj RFID products were chosen for the project because of their highly reliable performance. Restaurant owners, particularly those that are draft-beer centric, cannot afford to have their beer delivery system go down during peak hours. With Impinj's reputation for highly reliable systems, DraftServ is confident that the RFID portion of their beer management system is of similar quality to the rest of their components. Because DraftServ had already installed a similar system in Atlanta, installation of the RFID wall in The Pub, Tampa went smoothly.

Benefits

The Tavern Restaurant Group usually does “soft” restaurant openings, with minimal advertising or fanfare. Such was the case at their Tampa location, but word of the unique pour-your-own beer wall, the only one of its kind in Florida, quickly spread. After a few food critiques wrote about the restaurant, paying particular attention to the beer wall, the popularity of the restaurant grew, and sales have continued to remain strong. Management has also noticed a larger than normal number of people booking private parties, which are held on the second floor with the beer wall.

Return on Investment

Because the restaurant opened with the beer management and beer wall in place, they cannot give hard numbers as to how the two have improved revenue. Even so, the company knows things would have been far different without the technology. For one thing, their beer costs at that location are down. The number of beers they get out of a keg is higher than at their other pubs by an estimated 16-20%. And the sales from just the beer wall are significant. In the month of February 2011, for example, beer sold at the wall was an additional 13.7% over the traditional pub taps downstairs.

It has also provided accountability of the staff to management. Initially, the system provided a total tabulation of all beer poured each night. Management decided they would like greater granularity, so that they could monitor down to each bartender what was poured versus what was sold. Adding this capability provided the additional accountability they desired.

By looking at how many ounces they pour at the Tampa location versus comparable restaurants, the larger numbers in Tampa suggest that the beer wall is a big draw. They’ve also noted that the educational aspect of the wall, and the ability to pour just a small amount has appealed to women in particular. The self-service format of the wall seems to encourage socializing and is apparently more comfortable than approaching a traditional bartender.

Customers do not have to come in specifically for the draft beer wall in order to enjoy it. Once issued a card, they can order food at a table, view sports on the 50-inch monitors, socialize with others, and go replenish their beer at their own convenience. Management keeps the wall fresh by rotating the type of beer at the wall. When the system was first installed, the lines for the downstairs bar (where traditional bartenders pour beer) were connected to those for the beer wall. This situation meant that only a limited number of beers could be switched out on the wall at any given time, because the downstairs bar had only four taps that are routinely changed. But after seeing how popular the beer wall became, they decided to split the beer delivery lines, so that a wider variety of beers could be switched out at the beer wall.



Draft beer tally meter keeps track of highest selling beers.

The Tavern Restaurant Group is very pleased with both the beer management system and the beer wall. In addition to the dual boost in revenue these two provide by lowering costs and increasing sales, the beer wall in particular has brought a unique experience that continues to be a customer draw.

The industry average efficiency (turning the contents into revenue) from a keg of beer is about 75%. The other 25% is lost to spillage, theft, giveaways, and over pouring to achieve the perfect head on a mug of beer. With that much room for improvement, restaurant owners have a keen interest in finding a better way to manage their inventory. DraftServ Technologies' beer delivery management system has increased the efficiency of beer kegs to over 90%.



“We are very excited about what the draught wall has brought to our Tampa Pub—and that is added draught sales!

The wall not only appeals to the beer geeks but to the techies as well. It utilizes the latest in RFID technology as well as monitors every ounce of beer poured. The Guests consider it an added value because they can pour only what they want to drink at the time and because they become the bartender.

We are planning to utilize the draught wall in future Pubs as well as retrofit some of our older units.”

Ron W. Nelson

VP of Employee Development,
Enrichment & Cultural Integrity
The Tavern Restaurant Group

About DraftServ Technologies

DraftServ Technologies is the innovation leader in hosted draft beer management and control solutions. Using the SaaS (Software as a Service) model, DraftServ systems enhance the delivery, measurement, and profitability of draft beer service. For more information, visit www.draftserv.com.

About Impinj

Impinj, Inc. is the world's leading innovator in UHF Gen 2 RFID solutions for both item-level and supply-chain tagging. Impinj draws on its technical expertise and industry partnerships to deliver a wide range of products and solutions, comprising high-performance tag chips, readers, reader chips, software, antennas and RFID subsystem integration. Impinj's products provide robust performance, integration and cost effectiveness to a global customer base across numerous vertical markets with applications including inventory management, asset tracking, authentication and serialization. For more information, visit www.impinj.com.

