



RFID: coming to a BISTRO NEAR YOU

by h. buff herr

The three-star dining room, celebrity chef, and award-winning spirits and wine lists lose their cachet when your customer orders a round of *Richard Hennessy* and the server can't find it. Two questions: Did you just blow a \$1,000 sale? What else is missing?

You read the cost control sheets religiously, but how often and how well do you actually count the spirits inventory? Once a week? Once a month? How much is it? \$50,000? \$100,000? What's sitting on those shelves? What would Wal-Mart do?

CHIP AND TRANSMITTER

What does the world's biggest mass-merchant have to do with wine, whiskey, and your perfectly restored bistro? The answer is RFID, an acronym for Radio Frequency Identification, a technology incorporating a data chip (ID) and radio transmission (RF). Think EZ Pass, the Picture ID (PROX Card) that magically opens locked office-building

doors, or subdermal-implanted medical history chips. Now imagine reducing the chip and transmitter to the size and thickness of a postage stamp. *Star Trek*? No, Wal-Mart!

Like flat-screen TVs, RFID sat on the shelf for years as high costs and low demand made usage prohibitively expensive. Then Wal-Mart, with the ultimate goal of an inventory-tracking RFID tag on every item in every store, sent a memo to its top 100 vendors "suggesting" that RFID be implemented on every pallet and carton sent to its Texas distribution facility by January 2005. Combined with a similar Department of Defense initiative, the kick to take RFID mainstream had been delivered. Demand for the tags exploded, and costs plunged. From a starting point of dollars per piece, one vendor (Gillette) recently bought half a billion tags for ten cents each.

So what does this have to do with pouring whiskey? As Wal-Mart, the DOD, and the Costcos of the world pressure vendors to implement RFID, the Brown-Formans, Pernod-Ricards, and Diageos of the beverage industry and their

distributors will respond: more tagged items, broader usage, faster return on significant infrastructure investment, and a tag price of a nickel. RFID tags will eventually appear on every bottle of whiskey, beer keg, bag of oysters—every product you buy. Wal-Mart predicts ten years to full deployment; my guess is five.

While bar codes use the UPC to classify product groups, RFID tags use the EPC (electronic product code) to give every individual item a unique code number tied to a computer database. Today, a restaurant in Tokyo puts RFID tags on the bottom of each plate that carries sushi down its self-service conveyor belt. The customer takes food off the belt, the RFID-tagged plates are scanned at the end of the meal, and the customer's check is automatically generated.

INVENTORY AND PAYMENT EASE

Remember the missing *Richard Hennessy*? A hotel in Mexico installed an RFID system to log bottles when they enter the cellar, keep track of their cellar location, and log bottles when they leave. And with a tip of the hat to James Bond, the system can destroy the RFID tag if it's removed from the bottle; no one can pull a tag from a \$50 bottle and put it on one selling for \$2,000. The beverage list is updated in real time for the customer, waitstaff, and buyer in the back office.

Here's tomorrow's scenario: Your distributors walk in and wave their "Interrogator" (RFID reader). A list instantly appears on their laptops showing every bottle of wine and

spirit on site, when each bottle was manufactured and from whom it was purchased, and for how much. In the bar, a guest calls for your best single malt. The bartender pulls down a bottle of Bowmore 25-Year-Old as the RFID tag glued to the back label passes a reader and opens an electronic chit. Friends arrive, and after another round of drams, the patron waves an AMEX ExpressPay fob at the POS workstation. The tab is calculated and charged to the customer through ExpressPay—no wait for authorization, no receipt to sign, and because each pour was electronically recorded, no lost revenue.

When is this all going to happen? RFID currently has trouble passing through whiskey or any other liquid, and there are privacy issues regarding when the tags should/can be "turned off." But these problems will be resolved. In the coming year, American Express will deploy their RFID-based ExpressPay cards and key fobs, using a standard acknowledged by both MasterCard and Visa. POS interfaces and hardware are already available for around \$200 per workstation.

RFID is a technological locomotive. Keep track of inventory, tag each bottle of whiskey to control shrinkage, and speed the time and convenience of each credit card transaction. You can either watch it happen or become a participant. Take on RFID or be taken.