

Technology Industry

The UPC turns 30: the grocery industry celebrates the birth of the UPC bar code at the site of the first grocery scanner installation

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There were no candles, and nobody sang happy birthday, but there was a cake on hand when the bar code industry celebrated the 30th anniversary of the first grocery store UPC scan in Troy, Ohio, this past June. The Universal Product Code (UPC), now a ubiquitous part of the shopping experience, didn't produce its first familiar "beep" until a 10-pack of Wrigley's Juicy Fruit gum was passed over the prototype scanner at the Marsh Supermarket in Troy on June 26, 1974.

"This is a big deal for our industry," says Tom Jackson, president and chief executive of the Ohio Grocers Association, speaking at the ceremony. "The bar code has forever changed the world and the way we do business as an industry."

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Members of the Uniform Code Council (UCC) gathered at that same Marsh store on June 25 to celebrate the occasion, along with representatives from Marsh, Wrigley, Procter & Gamble, the cashier who made the first scan, and other long-time employees of the Troy Marsh store.

The anniversary occurred as the UPC bar code stands at something of a crossroads. Starting next year, the UCC will require retailers to scan the 13-digit European Article Numbering (EAN) bar codes used throughout the rest of the world in addition to 12-digit UPCs. And major retailers like Wal-Mart and Target are asking suppliers to phase in radio frequency identification (RFID) tags based on the Electronic Product Code (EPC) standard.

The Troy staff, the Marsh Company, and several of the employees from 1974 received plaques and statuettes during the ceremony. Company founder Don Marsh's granddaughter, Katie, and former cashier Sharon Buchanan (who made the first scan) cut the anniversary cake, which was emblazoned with a UPC bar code and decorated with packs of Juicy Fruit. Mayor Michael

Beamish declared it "UPC Bar Code Day" in Troy, as shoppers navigated their carts through the 60 or so onlookers gathered in front of the store.

Humble Beginnings

The UPC as we know it today grew out of a 1970 meeting of grocers and suppliers who took the project to the Super Market Institute and Columbus, Ohio-based Battelle Memorial Institute for testing. In 1973, the 12-digit linear code submitted by IBM was selected as the UPC standard.

"It was a very well-orchestrated, industrywide standardization process," says Al Hildebrand, former marketing manager for the data collection division of Spectra-Physics, which designed the scanner used at Marsh.

Although other industries had experimented with bar codes before 1974, the grocery industry was the first to embrace the UPC. After five years of development, Don Marsh agreed to let his Indianapolis-based chain of grocery stores be a test site.

According to Jodi Marsh, vice president for community relations, the Troy store was chosen because of its proximity to Dayton, Ohio-based NCR Corp., which designed the checkout counter. (Dayton, by the way, is the birthplace of the cash register.)

Former cashier Buchanan says her place in bar code history was a fluke. "I think there were only two of us working here that day." Buchanan had been working at the store off and on since the mid-1960s. The cashiers learned to use the technology on the job, although not too many products were bar coded. Wrigley's was among the first companies to source code its packaging.

In the early 1970s, grocery stores were in a much better position than other retailers to leverage bar codes, says Harry Knowles, founder and chairman of Metrologic Instruments Inc. They were distinguished by a finite number of price look ups (PLUs) and a high volume of items per average purchase.

"The vendor base subject to their control was narrow enough that they could impose this on suppliers," says Knowles.

Although bar codes are most associated with inventory tracking today, in 1974 the biggest benefit was the move from item-level price tags to shelf tags and the corresponding elimination of keypunch errors at the register. Hildebrand emphasizes, though, that bar codes also helped prevent under-ringing at the register and improved the process for taking shelf inventory, which enabled automatic reordering.

Slow Adoption

A few years after the first scan in Troy, only a few dozen stores had installed the equipment, and a number of manufacturers had abandoned the market. But the grocery industry did move forward--and without much hype or publicity.

"By the time Congress had hearings on bar codes, it was pretty much unstoppable," says

Knowles. "Given another year or two, the government might have stepped in and ruined it."

Shoppers' response to the new technology showing up in their grocery stores was not entirely positive. Consumer groups worried that without individual price tags, shoppers would be overcharged at the register. In the decade after its introduction, labor, environmental, and even religious groups railed against bar code scanning. The packaging industry grumbled about the new requirements and the effect on design. And a whole new industry of bar code verifiers was born to ensure quality