

The barcode

THE BARCODE the 30-second history

A conversation overheard between a supermarket executive and a senior lecturer at the Drexel Institute of Technology in Philadelphia in 1948 led student Bernard Silver to pursue the idea of barcodes. The question was about how to develop a system that could identify a product automatically. His first attempt at an answer – with his friend and fellow-student Norman Joseph Woodland – involved ultraviolet ink, which proved rather too expensive. The two friends had their barcode system patented in 1952, by which time Woodland was working to interest IBM in the idea. Ten years later, they sold the rights for just \$15,000. It was only when the American electronics giant RCA bought the patent and began to develop a similar system that IBM started to catch up. The first grocery item to be scanned was a bar of chewing gum in Toy, Ohio, in 1974. The gum and the receipt are now on display in the Smithsonian Institution in Washington, DC, and barcodes are, of course, absolutely ubiquitous – on books, cars, letters, packages and passports. They have become a lampooned and central part of modern life. Neither of the inventors made any more money out of it: Silver died of leukaemia in 1963 and Woodland watched bemused as their creation took off across the world.

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3-SECOND BIOGRAPHIES

NORMAN JOSEPH WOODLAND
1921–2012

American lecturer in mechanical engineering who first developed barcodes by drawing a series of lines in the sand *

BERNARD SILVER
1924–63

American electrical engineer who came up with the original idea for the barcode

30-SECOND TEXT

David Boyle

3-SECOND SURVEY
The barcode – a simple pattern of black lines of varying thicknesses that can be scanned electronically – provides the rapid solution to identifying one item among millions.

3-MINUTE OVERVIEW
Woodland and Silver were not the only people working on the idea. Unknown to them, an executive from Pennsylvania Railroad was trying to work out how you could identify carriages or trucks instantly. David Collins tried a system of blue and red lights called KarTrak. The idea did not take off there but was adopted instead by a New Jersey toll road that was trying to work out which cars had paid their subscriptions.

