

scanning with another vendor in January but he doesn't know yet which one. "Only IBM and Univac have them now (scanning systems) but there are seven others talking about it and we're going to look at them all." They may end up with multiple vendors, he said.

The seven others are Bunker-Ramo, NCR, Singer, MSI Data Corp., National Semiconductor Corp., Litton/Sweda, and Data General/Dymo. Bonner and others in the grocery industry will have an opportunity to look at some of their offerings at the Supermarket Institute (SMI) meeting in Dallas early in May.

MSI Data will demonstrate its Astros system linked to a scanner produced by Scope Inc., Reston, Va. Scope also is supplying scanners to NCR which, at this writing, had not firmed up its plans for the SMI but indicated it would have a demonstration of a UPC scanning system in the near future. National Semiconductor will be at the SMI demonstrating its Datachecker with a scanner it makes in-house.

For Litton/Sweda, its demonstration of a UPC-scanning POS system at this year's SMI will be a second. It demonstrated a prototype system at last year's Institute just one month after adoption of the UPC had been announced. "We had been working with a semi-circular code before the announcement," said Litton's J. Roger Moody. Within 30 days they converted the system to read a bar code, which the UPC is. Litton's scanners are made by the Zellweger Group of Uster, Switzerland.

Moody said Litton's scanning systems will be ready for delivery in the fourth quarter of this year. IBM has a similar schedule for its 3660 grocery store system (which uses scanners produced by Spectra Physics, Inc., Mountain View, Calif.) announced last October and demonstrated at a National Assn. of Food Chains show in November. And Univac, of course, is taking orders now.

Others are moving more slowly, not sure the need is there right now. A spokesman for National Semiconductor said his company has no firm plans for the scanning system beyond the demonstration at the SMI. "I don't know... there aren't many items source marked right now."

Janet Norman, vp communications for Singer Co., said Singer is "heavily and deeply involved" in development of a UPC scanning system. The company is working on its own scanner and is investigating outside sources of supply. "We will be prepared to provide scanning equipment when our customers need it," said Ms. Norman. But she's not so sure that time is now. "There are limiting factors the marketplace imposes. One is the degree to which goods are marked and another

is the availability of in-store marking capability."

MSI Data's president, Bill Bowers, said his company will go to a store test after the SMI for six to nine months, during which "we will figure out the paybacks." He sees availability at the end of this year or early in 1975. "We believe scanning is going to take its own sweet time, maybe two to three years, to get into widespread use."

Some won't scan

Bowers said MSI, in testing its system in its lab, has found some source marked labels are coming through not fully up to specs and they won't scan. Leo Beinhorn of Distribution Code Inc., Washington, D.C., which is implementing and administering the UPC, concedes that this has been a problem and that some manufacturers using the UPC have been making "peculiar types of mistakes"—such as one who chose to drop out linear bars, effectively reversing the numbers read by the scanner. The symbols can be checked out by a comparator but the ultimate test is scanning. Beinhorn said. "It

Modeling

Courts, Pudding and Bill Walton

How do you weight a variable like UCLA's Bill Walton, when the 6'11" redhead plays basketball the way he did against the Univ. of Southern California March 9?

After the fact, anyone who had seen the game would have had to answer: pretty heavily. Four days before the game, Bill Walton was just one of many variables (others included bench strength, disqualification potential, rebounds, and assists) considered by Bud Goode when he picked the UCLA Bruins over USC by 15 points. He came closer than the professional odds makers who made it UCLA by 7. The Bruins won by 30, leading one observer to quip, "He (Goode) forgot there'd be a second half."

Goode made his prediction before a meeting of the Los Angeles chapter of the Assn. for Computing Machinery (ACM). Predicting the outcome of basketball games was not what he was there for, although he and his "Cal the Computer" have been predicting the outcome of sports events via Los Angeles' KNXT tv station for several years.

He was there to make a case for the use of computers and modeling in journalism, something he feels will put the "why," which he considers the most important of the five w's, back into journalism.

either will scan or it won't. There's no such thing as a little bit pregnant here. The specifications are very exacting." He added that most faulty symbols are caught in the trial and error stage before long runs have gone out.

Beinhorn said source marking by manufacturers is "stampeding at the present time. We're right on target with our estimate that 50% of supermarket items will be source marked with the UPC by the end of this year and better than 75% will be marked by the end of 1975."

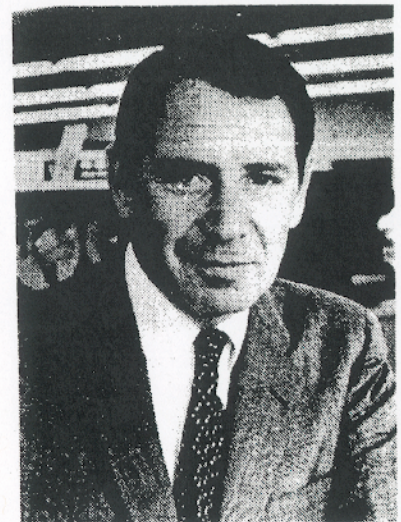
A manufacturer who wishes to source mark applies for membership in the Universal Product Code Organization through Distribution Code Inc. DCI then issues a manufacturer's code which is the first five digits of the UPC. The manufacturer uses the last five to identify the various products in his line. Beinhorn says they now have 1,100 members signed up, representing better than \$60 billion in annual sales out of total annual grocery store sales of \$108 billion. That's a lot of groceries.

—Edith Myers

Goode called most of what appears in newspapers today "white noise." He said all the objective news in most papers today would fill one quarter of one page.

"Why do Supreme Court justices vote the way they do? Why do football teams win or lose? There is a need for greater objectivity in journalism and one way is with a computer and a mathematical model."

Goode believes his methods are ap-



BUD GOODE

Getting the big "W" back into journalism

plicable to all pages of a newspaper where there's an available data base. He uses principally matrix methods and multiple regression equations to predict outcomes and explain why. So far he has had newspaper columns pub-