SCAN newsletter

The management Newsletter for all industries involved with bar-code scanning and related technologies.

SCANNING, CODING & AUTOMATION NEWSLETTER • 11 Middle Neck Road • Great Neck, N.Y. 11021 • (516) 487-6370

INTERNATIONAL EDITION

ISSN 0273-3080

Volume 1 Number 6 April 1983

Last summer, SCAN Newsletter....

....was pessimistic about any international standardisation for outer case coding and symbology (SCAN Jun 82). Now we can see some light at the end of the tunnel. It's worth reviewing the issues and show how recent moves have helped bring the problem into focus and closer to resolution.

First, the question of code number. The early UPC (US and Canada) view was that the outer case code and consumer product code could be the same, and that discrimination would be achieved by a difference of symbology and the environment in which the symbol was being scanned, eg backdoor or front end. The view held by all European authorities was that this was insufficient and the code numbers needed to be different. They cited three main reasons: computer files cannot distinguish between symbologies; outer case and consumer products will be handled, intermingled with each other, through some scanning systems, eg in cash and carry warehouses; and in some countries consumer product bar codes will show through (eg where shrink wrapping is used) and symbology alone will not be foolproof.

The other major questions were concerned with the relationships between the consumer product code and the outer case code, and with symbology. The German school favour totally different numbers; the French wanted some link. The problem with the French solution was that it required a 16 digit code and symbol.

Last May, the EAN General Assembly could not resolve these differences. The Swedish committee went back to the drawing board and put forward a proposal which at first was viewed as a third option. As the EAN committee considered its merits over the next few months, it was seen as a bridge between the previous incompatible alternatives.

The proposal is to designate the first (left hand) digit as the logistical variant. If it has the value "0", there is no numeric link between the outer case code and the consumer product code. A number 1 through 9 would designate and discriminate between case sizes, eg 24s, 48s, 50s; and, in addition, the next 12 digits must be identical to the 12 significant digits of the consumer product code on the merchandise packed inside the outer. The last digit in all cases is the check digit.

The adopted and published UPCC version (SCAN Feb 83, Mar 83) closely follows the Swedish proposal but uses "0" and "1" logisitical variants only. What will be its impact on the rest of the EAN Association? The formal answer has to await the outcome of the next General Assembly in May. The use of the logistical variant "0" can satisfy the German view that every different physical unit, whether case or consumer product, should have a different code. The use of logistical variants 1 through 9 follows the French approach but does so in a 14 digit code and symbol and not the 16 digit one proposed by the French. We understand that although the French specification may still remain on the EAN statutes, there will be an agreement not to use it for three years. This means that the ITF14 symbol (ITF = Interleaved Two of Five in EAN parlance) stands a good chance of being the single international standard.

In addition, the EAN Association will allow EAN-13, and more rarely EAN-8 symbols, on outer cases where the printing standards are suitable. No one in Europe sees this as a problem. It is felt that there will be many advantages in having a dual capability scanner (ITF14 and EAN consumer codes) at the back door. After all, it will be essential for the front end of European cash and carry outlets.

Wow! That's the only word....

....we can use to report the latest scanning figures from Japan. We have only the barest details, but they are so impressive that it's worth revealing the facts as we know them.

Our previous reports (SCAN/IE Jan 83, Feb 83) showed 120 installations as at October 82 and 217 installations as at November 82. The difference was mainly due to improvements in reporting the installations. The latest figures show 914 stores scanning -- yes, nearly 1,000 installations.

The jump in numbers -- we cannot say growth in installations because we don't yet know when they took place -- is due mainly to one factor: Seven-Eleven chain now has 732 stores equipped with 1,464 Tokyo Electric terminals, using light pens and scanners. The Seven-Eleven units are the smaller, so-called "convenience stores" owned in the US by Southland Corp.

Comment

Congratulations to Japan for leaping into the lead within the EAN community and overtaking Canada to become second after the USA in the number of installations. TEC has also increased its market share considerably.

However, Japan is not yet second in the number of scanner-based checkouts. This reinforces the view, expressed in the last issue of SCAN Newsletter, that the number of store installations may no longer be the only suitable measure of the penetration of scanning.

We have been attempting to give wide, accurate and up-to-date coverage of the growth in EAN scanning installations, but the information we receive is patchy. We shall continue to publish the most up-to-date information available, but would prefer to offer a better service to our subscribers. We would also like to know more details about installations from equipment suppliers and coding authorities. The growth of EAN scanning is one of the more exciting features of our industry; if you have some details, share the fun with others.

The last two issues of....

....ana news (the occasional newsletter of the Article Number Association -- the UK's EAN authority) has reopened the controversy about verification (and its related, but unspoken, problem -- accountability. See SCAN Mar 81, Jun 81).

The plea for the ANA to "publish a specification for EAN bar code verifiers and grant official ANA approval to verifiers which meet that specification" comes from Mike Flynn, of ICI Hyde Products Ltd. Under the headline challenge: "Verification -- Get Off the Fence, ANA", he was generally dismissive of the printability gauge. The real problem for a general merchandise manufacturer printing in-house, according to Flynn, was that he did not have "the resources to evaluate the respective technical merits of verifiers on the market."

The latest issue of ana news has a thorough exposition of the subject by Neville Hughes, Chairman of the ANA Technical Working Party. Hughes had gained considerable practical experience through his research and development work for Metal Box PLC, the leading European packaging supplier. He reasons that the compensation procedures of EAN/UPC are adequate and he would welcome details from anyone who has positive evidence that the printability gauge approach does not work.

He sets out the criteria for verification equipment for the printed symbol. It must: handle all print processes, materials and product shapes; scan and verify ANY symbols within spec; NOT reject ANY symbols within spec; positively identify all symbols out of spec.

On this point he concludes "We are not aware of any equipment which RIGOROUSLY meets these criteria. The ANA is not an approver of instruments. Perhaps the verifier manufacturers would like to sponsor a cooperative study".

Neville Hughes' article also covers: in-process quality control, verifiers as an aid to quality measurement, acceptance of low levels of non-scanning symbols and the shortage of data on the performance of retail scanners. It has lots of food for thought.

Copies of both articles are available from Article Number Association (UK) Ltd, 6 Catherine Street, London WC2, England.

There is a new owner for....

....the business which once was Photographic Sciences (Bar Code Products) Ltd. A spokesman for the Receivers gave us the relevant details over the last few days, but the new owners have asked us not to disclose their name yet. As we predicted last month, there are still sensitive negotiations taking place before the deal is closed.

We can say that the new owners are American, but are not the old parent company. A few of the senior UK executives had been made redundant by the Receiver before the new owners took over. In total over a dozen people have left, providing a streamlined base for the future. All current negotitaions are reported to be very amicable and no hitches are expected, but the president of the new parent company wants to play things very carefully. We expect to announce all details next month.

In these days of rationalisation ....

....of bar code symbologies, it is unusual to hear of a new code which can be justified in its own right and for a dedicated application. Datawand, a small UK company, launched a special bar code system last October to exactly emulate the alphanumeric keyboard of a Prestel viewer. Prestel is the UK's public service Viewdata system operated by British Telecom (the UK telephone service operator). Prestel standards and hardware are also used in many corporate systems and elsewhere in the world.

It was essential that the primary character set had a "*", used at the beginning of each Prestel reference, and a "#" used at the end. Established alphanumeric codes like code 3/9 and Telepen were rejected for this reason, and a new code invented. The DATAWAND format bar code specification is not being generally published, but is available under licence to various bar code print suppliers.

We have a few details of the bar code: it is variable length; includes a primary character set of 13 digits including "*" and "#"; is reasonably compact; has a "self-checking digit"; and by shifting to a secondary set, all ASCII and some other characters can be easily encoded.

One application already in widespread use allows travel agents to search through a bar coded directory of flight destinations, wand the associated bar code and gain access to the relevant data. The keyboard approach is not only slower and less accurate, but the expensive on-line menu selection routines are cut out by direct access through the bar code.

Datawand is now actively developing its export market for the Viewdata Datawand. It has recently extended its product range to simulate any standard or special keyboard. For example, the Greek alphabet and special function keys have been covered.

Datawand had no major problems getting its system accepted by the Prestel authorities because no previous bar code conventions existed for the application. Datawand's current thrust, which includes emulating keyboards with special command functions, is similarly based.

Datawand, 72 Bolton Crescent, London SE5 OSE, England; UK phone 01 587 1215.

* * * * *

As SCAN/IE has now been running for six issues, it may be time for what the English call a half-term report. We would like you, the subscriber, to let us know how we can provide a better service. We need more information on the industrial scene and although our reports have gone almost round the world, we would like to cover more countries in detail. So note our address and keep our mailbox full.

SCANNING, CODING & AUTOMATION NEWSLETTER. 11 Middle Neck Road • Great Neck, N.Y. 11021 • 516/487-6370
Published monthly. PUBLISHER/EDITOR: George Goldberg; CIRCULATION DIRECTOR: Teddy Allen.
INTERNATIONAL EDITION EDITOR: Paul Chartier • 15 Fairford Crescent • Swindon, Wiltshire SN2 3AB England • (0793) 72394