

# SCAN

IDENTIFICATION • AUTOMATION • INFORMATION • COMMUNICATION • INTEGRATION

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EAN ®  
NEW ZEALAND

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## Supply Chain Management

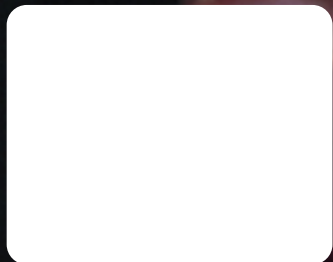
Foodstuffs (South Island) Ltd's frozen and chilled Distribution Centre explained.

### Verification

All you need to know about verifying your products.

### E-Commerce

Update on EANnet and XML.







Margaret  
Fitzgerald  
CHIEF EXECUTIVE

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## FROM THE Chief Executive's DESK

I want to express our delight that approximately 70% of our members paid their membership fees on time. Those members have taken advantage of our prompt payment discount, and this high success rate enables EAN New Zealand to spend more time on member services, and less time chasing invoices.

With the major New Zealand grocery retailers moving to mandatory verification of bar codes, it's timely that this issue of SCAN magazine has a host of information on EAN verification. Members receive 10 free verifications per year as part of their membership fee. In the past this service has been underutilised.

As you will read in the magazine, verification is a completely different process from scanning, and provides you with excellent diagnostic information on your bar codes.

In this issue we also introduce our new staff member, Robert Turner, who replaces Alan Carlson. I know a number of you have already dealt with Robert on verification reports and other matters, and are aware of his skills and contribution.

We also bring you updated information on EANnet, which is broadening its customer base in Australia. We are pushing ahead with the work required to make EANnet available

to New Zealand members. A key first step has been to train our own staff. We've also been working to improve the basics of bar coding and data capture in New Zealand. Quality information is important with data synchronisation – otherwise, the old "garbage in, garbage out" adage applies.

The next stage is to pilot EANnet in New Zealand. We have a number of organisations interested in participating in the pilot, and we are preparing a document to outline the steps involved in participating. If you are interested in joining the EANnet pilot, please register your interest with Robert Turner by email (robert.turner@ean.co.nz) and encourage others to do the same.

As a member-driven organisation, it's important for EAN New Zealand to hear from you. We really appreciate those of you who take the time to pass on queries, suggestions or comments.

We hope that the coming festive season is both profitable and filled with good cheer for yourselves, your colleagues and your families.

Please note that our offices will be closed from Monday, 24 December 2001 to Friday, 4 January 2002.

We look forward to working with you in the New Year.

### FEATURE ARTICLES:

**Can we verify that for you? (Please?)** on page 3 – Read why it is so important to get your bar codes verified. Failure to have bar codes verified before use can result in unnecessary costs for your company.

**Mandatory bar codes for Foodstuffs (South Island) Ltd** on page 6 – In this article we interview Operations Manager John Mullins about his company's decision to insist on EAN-128 bar codes on date-sensitive goods.

### REGULAR COLUMNS:

**Don't be fooled by phoney "health wars"** on page 9 – In this edition of SCAN we introduce a new health sector column to talk about developments in this fast moving industry group.

**E-Commerce** on page 10 – SCAN introduces readers to EANnet version 2, which is a new on-line data synchronisation catalogue. We also talk about the new XML standards.

**Bar Code Basics** on page 13 – SCAN provides you with 10 easy steps to make better bar codes.

EAN New Zealand is part of a global network of numbering organisations operating in 128 countries that services over one million member companies in the retail and manufacturing sectors using the EAN-UCC system. EAN numbers represented as bar codes enable capture and communication of vital supply chain management information.

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# Can we verify that for you? (Please?)

Verification assures everyone in the supply chain that bar codes will perform as intended.

What are verification standards? Why will one verifier sometimes appear to give a different result from another?

When bar codes were first introduced some 30 years ago, the printing industry's standard quality tests were the only way to check bar codes. These were not good predictors of whether a bar code would work in the field.

In the mid-1970s, existing verifiers examined bar widths, ratios between the widths of narrow and wide bars, and colour contrast between the light and dark elements of symbols. If these were within tolerances arbitrarily defined by the manufacturer of the verifier, then the bar code was said to be "in spec".

This "traditional" verification has been used for over 20 years, but has some shortcomings:

- It is based on only one scan, so it may capture an unusually good (or bad) sample of the whole symbol.
- Scanners vary in quality and performance, so a symbol may meet the traditional criteria yet not be reliably scannable.
- Some bar code attributes (such as correct bar width) are more important in some types of symbol than others, but traditional verifiers didn't allow for this.

EAN has moved away from traditional verification in favour of a method based on scan reflectance profiling (SRP) (also known as "ISO verification" or "ISO/IEC15416 testing" because it is defined in an ISO standard). The new verification methods (how we check the bar code) started with an ANSI (American National Standards Institute) standard, and have been refined through a European (CEN) standard and are now embodied within an international (ISO) standard. Within the ISO standard there is a little clause which refers to alternative or modified methods of this test which are "application specific" and it is under this clause that EAN International and UCC Inc have published their "General EAN·UCC Specifications" (commonly called Genspec) as a "tailored" version of ISO specifically for the supply chain.

In ISO testing a verifier analyses the behaviour of the light that is reflected back from the bar code. By plotting the rise and fall of the reflected light at each

stage as the scan crosses the bar code, the verifier "sees" what a scanner would "see", instead of measuring merely what is printed on the paper.

The good news for all of us is that we now have ONE global standard. No longer are we required to comply with one set of standards for one country and a different set for another country, or worse still one set of rules for one retailer and a different set elsewhere.

This new global standard will benefit printers and suppliers because they now know that they have an objective analysis available to ensure that they always meet their customers' bar code quality requirements. It will also benefit retailers who now can evaluate bar codes and know whether an unsatisfactory scan rate is due to poorly printed bar codes or whether it is due to the scanning environment (age or condition of scanners, position of lighting, operator scanning technique etc).

ISO-compliant verifiers report parameters such as "edge contrast", "modulation" and "decodability", assign a grade to each parameter and then an averaged total grade to the whole symbol. This grading system is a big improvement on the "pass" or "fail" issued by traditional verifiers, because it allows humans to decide what grade is acceptable. And because results are based on the averaged grades assigned over 10 scans, ISO testing is more representative of the true quality of the symbols tested.

A grade of C (or 2 if it is expressed numerically) is a "pass" for all EAN·UCC bar codes except ITF printed at magnifications above 62.5%, which may be accepted at D grade.

Currently, samples sent to EAN New Zealand are tested by both methods and results are reported on the standard verification report. This refers to the traditional parameters but also bears a panel containing the words "complies/does not comply with EAN International Specifications" (meaning the ISO verification specifications, as well as EAN requirements for numbering, symbology, size and location).

"During the transition to the ISO standard, we are leaving the verification report basically unchanged so that people can use the terminology they know," says Accreditation Consultant Owen Dance. "In a few months, once we and EAN Australia have fully completed the migration to the ISO testing regime, we'll jointly introduce a report with new wording."

In the meantime, a symbol that fails because of a poor ISO grade will be shown as "out of spec" for whatever feature in the traditional parameters ("print quality", "bar width" and so on) has caused the poor grade. By correcting the shortcoming indicated in the list of traditional parameters, the member can achieve the improvement required for a higher grade.



## Verification and the retail environment

Poor quality bar codes can cost retailers time, money and goodwill from their customers. This is why many of them have moved or will be moving in the near future towards mandatory EAN verification.

The verification reports indicate the scan rate achieved by the bar code sample with a standard scanner, plus attributes such as bar height, print contrast and whether the symbol complies with EAN specifications.

Many retailers choose to reject products or require re-labelling whenever a verification report contains any negative comment – even if the reported scan rate is 100%. This is their right, and given the limitations of scan-checking in isolation (see article on the next page) such a policy must be regarded as prudent.

This can add costs to manufacturing processes and manufacturers can avoid these unnecessary costs by producing bar codes right first time. They can also encourage their suppliers to do the same.

“I strongly advise members to send bar code samples for verification testing regularly, and to remedy any shortcoming disclosed by the tests,” urges EAN New Zealand Chief Executive Margaret Fitzgerald.

“We want to add value to our members by helping them to achieve excellence in their logistics. Perfect bar codes are crucial to that process.”

Margaret says that the minimal cost incurred by regular testing is cheap insurance against the costs of rejection or re-labelling of whole consignments.

## The technical stuff

Verification of bar code symbols as specified by the EAN·UCC General Specifications is based on ISO/IEC Standard 15416, published in 2000 and generally known as “the ISO Standard”. This is compatible with the earlier American Standard ANSI X3.182 (“the ANSI Standard”), so users of equipment compliant with that standard may continue to use it to meet the requirements of the EAN·UCC General Specifications.

Testing must be conducted with a verifier that complies with those standards, including using a 670 nanometre light source and defined scanner apertures that match the type and size of symbol.

The following table illustrates the passing grades and testing conditions specified:

SYMBOLGY	Passing grade (ANSI alphabetical or ISO numerical)	Aperture Mils (thou. Inch) and (millimetres)	Wavelength (nanometres) (+ 10nm)
EAN/UPC <sup>1</sup>	C or 1.5 – 2.4	6mils (0.150)	670nm
ITF-14 (50-62.5% Mag)	C or 1.5 – 2.4	10mils (0.250)	670nm
ITF-14 (>=62.5% Mag)	D or 0.5 – 1.4	20mils (0.500)	670nm
UCC/EAN-128	C or 1.5 – 2.4	10mils (0.250)	670nm

Results/requirements are expressed as grade/aperture in mils/light e.g.

2.3/06/670 = C grade assigned in a test with a 6mil aperture and 670nm light source. Less than 0.5 is F.

<sup>1</sup> EAN-8, EAN-13, UPC-A, UPC-E in retail or retail and distribution.

## Bar code heights

Height is a very important bar code dimension and shortening of bars (truncation) is strongly discouraged. In EAN verification testing truncated symbols will be reported as failing to meet EAN International specifications, except where the size or shape of the unit has left absolutely no alternative. There is no maximum bar height. Symbols may be printed with over-height bars, and doing so may in fact enhance the scanning performance of the bar code.

EAN-13, UPC-A <b>NOTE:</b> height/width ratio is important. Consult EAN manuals for correct height for symbol size.	21mm – 52mm depending on symbol size.
EAN-8 <b>NOTE:</b> height/width ratio is important. Consult EAN manuals for correct height for symbol size.	17mm – 43mm depending on symbol size.
UPC-E <b>NOTE:</b> height/width ratio is important. Consult EAN manuals for correct height for symbol size.	21mm – 52mm depending on symbol size.
ITF	32mm excluding bearer bars at all sizes.
EAN-128 in distribution & logistics.	32mm at all sizes.
EAN-128 in special applications.	13mm – 32mm depending on symbol size.

EAN New Zealand gratefully acknowledges the contribution of Paul Yarnell of Axicom Auto ID Ltd (UK) in reviewing the verification articles in this issue.

## verify your product before it is too late

- EAN members get 10 free bar code verification reports per financial year, then pay \$15 per verification thereafter.
- Non-EAN members pay \$25 per verification report (no free verifications).
- Save time and money: EAN New Zealand verification reports are now accepted in Australia.

### FOR MORE INFORMATION...

...on EAN Verification Services, contact Raman Chhima (04) 801 2895 or email [raman.chhima@ean.co.nz](mailto:raman.chhima@ean.co.nz) or Robert Turner on (04) 801 2896 or email [robert.turner@ean.co.nz](mailto:robert.turner@ean.co.nz)





## Verification explained

Why verify? That's a question EAN staff are often asked, especially when a bar code that appears to work well still fails a verification test.

"Testing a bar code by scanning it with an ordinary scanner tests only whether the symbol will work with that particular scanner," explains EAN's Raman Chhima. "It doesn't tell you how good the symbol actually is, or whether it will scan on other scanners it is likely to meet out in the diverse retail environment.

"You may drive your car safely from home to work, but that wouldn't prove that your tyres are in good shape. You've only shown that your tyres were good enough to prevent skidding on that stretch of road in the conditions applying on that day.

"To be really confident about the safety of your tyres, you have to compare them with a recognised standard. The same principle applies when you try to predict how bar codes will perform."



Scanners vary between manufacturers and between generations. They use different decoding algorithms, project and receive light through different optics, and operate more or less well because of age, condition and operator technique. For all these reasons, Raman says, a bar code should be tested for its inherent characteristics, not for its scannability on one or two scanners.

Raman advocates the use of a suitable verifier for testing bar codes, rather than a simple scanner. "A scanner will tell you if a bar code won't scan, but it can't provide diagnostics to explain what the problem is and how to correct it. A verifier that complies with the ISO standard supported by EAN will score bar codes according to a graded scale, whereas scanners will simply scan them or not scan them."

As some of New Zealand's major retailers are moving towards mandatory verification, EAN recommends verification tests on samples of bar codes on all new products and thereafter on each label print run or at least once a year. Members receive 10 free tests in each financial year and a discounted charge of \$15 plus GST per test applies thereafter. Non-members are not eligible for free tests and a charge of \$25 plus GST per test applies.

Samples should be sent by post or courier to EAN New Zealand's head office (Level 2, Mainzeal House, 181 Vivian Street, or P O Box 11-110, Wellington). Retail items should preferably be sent in their finished form with packaging filled or at least assembled (so that it is tested in its final shape). Trade units may be flat.

EAN will carry out verification tests on artwork, but the finished bar code will be a different product since it will be printed on different material and using different technology. Verification tests cannot be carried out on faxed or digital images.

EAN New Zealand verification reports are accepted in Australia and New Zealand as well as most other countries.

## A BEASTLY QUIZ

What lives between three to five years, carts around 25 tonnes of stuff in that time, and travels an average 180 kilometres per week?

Another clue: there are about 70,000 of these beasts in New Zealand.

Stumped? You don't have to feed them, and they do all right in the wind and rain.

Okay, one more clue: you can buy one for about \$200.

**ANSWER:** the average supermarket trolley.

SOURCE: Hadley Wright, Managing Director of Faulkner Collins, in NZ Business, May 2001



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# Mandatory bar codes for Foodstuffs (South Island) Ltd

Foodstuffs (South Island) Ltd operates one of the most advanced chilled and frozen Distribution Centres in New Zealand.

The centre is based at an 11,000-sq-metre chilled and frozen warehouse at Hornby in Christchurch. SCAN spoke to Wholesale Operations Manager John Mullins about how the Distribution Centre works, and why EAN-128 bar codes containing expiry dates are mandatory on date-sensitive goods received at the Hornby facility.



**SCAN:** The Australasian Grocery Industry Guidelines don't yet apply to chilled and frozen goods in Australia. So why is Foodstuffs the only company applying the Guidelines to chilled and frozen products here?

**Mullins:** A key advantage of centralisation is being able to better control date-sensitive perishables – getting fresher product into the stores, and reducing wastage. To do this, it is imperative that we capture expiry dates electronically, and that means using the EAN-128 bar code technology.

**SCAN:** How do you use the date and batch data in the EAN-128?

**Mullins:** When goods are received, each product that is date-sensitive must have an expiry date entered against the received stock. We follow the one-expiry-date-per-pallet rule. There are two tests at this point – FIFO (first in, first out) and date limits.

The FIFO check compares the expiry date against existing stock to ensure the supplier is sending goods to us in date order. If it is not, our buyer is alerted and she or he decides whether to accept or reject the goods.

The date limits check is to ensure we have enough time to sell the product to our members and to the final consumer.

Each date-sensitive product has a limit set in our electronic system. For example, if Product A has a 30-day inwards date and it comes in with only 29 days left, we can't accept it unless permission is granted from the buyer.

If goods are accepted, the Warehouse Management System (WMS) "shuffles" the stock into a position that ensures it will be distributed to our stores in correct date order.

In the picking phase, product is checked against the same two rules – FIFO and date limits. FIFO requires us to pick the oldest stock, and the WMS checks that the date revealed by scanning the EAN-128 bar code is the oldest in the pickface.

The despatch date limit check works the same way as the inwards date limit. If a product has a 10-day despatch date limit set up in the system, we cannot pick that product if there are nine days remaining on it, unless permission is granted from the buyer.

Apart from the expiry date, the WMS can record any other application identifier from the bar code.

Batch data is optional, but is one of the more important of these other identifiers. It can be used, for example, if the manufacturer recalls a specific batch.

We can quickly identify the pallets and where they physically are – including whether they have been sent out to stores.

**SCAN:** How important is it that all this is done by scanning, rather than with a more hands-on system?

**Mullins:** The advantages of scanning are both in time and in accuracy. The alternatives are a paper-based system or requiring an operator to type in digits.



Either way would take much longer – and even more important than that, they would introduce inaccuracies.

**SCAN:** Do you impose any penalty on suppliers of product who don't comply?

**Mullins:** Suppliers are asked to uplift stock that is received at the Distribution Centre with non-conforming bar codes. When problems have arisen, open communication with suppliers has proved very beneficial both to Foodstuffs and to the suppliers involved.

Not a single supplier has dropped out of supplying Foodstuffs as a result of our insistence on EAN-128.

Most suppliers were already well



aware of these advantages and took our insistence on EAN-128 in their stride. They all knew that Australia was going this way, for example.

And many of our suppliers realise that some of the benefits of using EAN-128 accrue to them, not just to us. When a supplier provides bar coding with both date and batch numbers, they can use the same information within their own warehousing operations.

In fact, some suppliers seized this as a real opportunity. To mention just one, Heller Tasty Ltd, which supplies us with smallgoods like hams and bacon packs, worked very closely with us to make sure it was ready when our system went “live”. From what I can see, the changes it has made have led to real benefit to its own systems.

**SCAN:** What about bar codes that comply with the Guidelines but that fail to scan?


**Mullins:** We continue to work with suppliers on issues regarding inferior bar coding. Generally these problems can be resolved within a short period.

**SCAN:** You must source some goods from overseas that are not labelled with EAN-128. What do you do about them?


**Mullins:** With the exception of Australia, we do not directly source any chilled or frozen product from overseas that would be required to have an EAN-128 bar code.

But we have had problems with overseas suppliers in the past. We once received a whole container of dried fruit from Iran with the words “bar code” instead of an actual bar code on two sides of the cartons.

That one was the hands-down winner of the “Worst Bar Code” competition!



# RETAIL SOLUTIONS PROVIDER

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## Getting serious about bar codes is Progressive

A supermarket survey by EAN New Zealand has given Progressive Enterprises some leads to follow in its efforts to improve the integrity of bar code scanning.

“We asked for the survey to get a better handle on the specific problems at check-out,” says Mark Brosnan, General Manager Merchandise at Progressive.

“The costs of poor scanning are clear. Every time a customer is delayed, the wait time increases, which is frustrating for all customers waiting to be served. Every time an operator has to key in the number, there is a risk of error and thus lost revenue and point-of-sale information.

EAN staff surveyed check-out performance in real time at two Foodtown supermarkets, and provided Progressive with:

- data on non-scanning or difficult-to-scan products
- advice on improvements in bar codes that might improve scan rates
- other recommendations to enhance the reliability of scanning.

While the results of the audit are confidential to Progressive, a few key points emerged.

Problem bar codes on all products appeared to be under-reported, with most check-out staff saying they reported faulty bar codes only “sometimes”. Scan rates on these products were inhibited by issues like the location, colour, size and print quality of retail bar codes.

“The survey showed a number of points for future action,” Mark says.

“We’ll be working with our suppliers to improve the performance of their products that are difficult to scan at check-outs. If more manufacturers undertook EAN training or went through the EAN Accreditation Programme, then bar code quality would improve across the board. As a minimum, verification of bar codes through EAN in Wellington would give us greater assurance of quality.



“A lot of the other suggested improvements we can implement ourselves. For example, we’re checking our in-house thermal printers to see why the bar codes on bakery and deli items tend to perform poorly. We’re also developing instructions for check-out operators to report poor-quality bar codes by utilising pilot stores.

“Finally, we’re considering the EAN Accreditation Programme to ensure the quality of bar codes on our own products and to set the example we’d like our suppliers to follow.”

### FOR MORE INFORMATION...

...would your organisation benefit from an independent and impartial survey of bar code performance? Contact Account Manager Hayley Moon at **EAN Consulting Services** by email [hayley.moon@ean.co.nz](mailto:hayley.moon@ean.co.nz) or ring her on (021) 711-169.



Welcome to our newest members, who have joined EAN New Zealand from 16 July 2001 to 31 October 2001.

4 Ever Free Bakers	Natures Corner
Absolutely Fabulous Catering	Nekta Products Ltd
ADP Industries Ltd	New Zealand Apple Ltd
Advantage Training & Consulting Ltd	New Zealand Office Products
All My Love Stationery	New Zealand Wood Moulding Company
Amberlene Accessories	No C'z
Ancor Food Cans New Zealand	North Harbour Ice Ltd
Anthony James Wines Ltd	Ode Record Company
Armco Marketing Ltd	One Tree Hill Trading Ltd
Asia Pacific Importers/Exporters Ltd	Orca Products (NZ) Ltd
Aughnacloy Walnuts	Origin Wines Ltd
Beesonline Ltd	Paper Box (NZ) Ltd
Bell's Packhouse	Parisian Neckwear
Bennie and Son Ltd	PCI Fiji Ltd
Bentin Foods Ltd	Performance Speedsuits Ltd
Biotechnologies Ltd	Perry Group Ltd
Brelita Foods Ltd	Pitter Patter
Cardaloe Flowers	Plastic Bags (Auckland) Ltd
Charles Murdoch Ltd	Pocket Solutions Ltd
Chemical Solutions	Powerstick Company
Columbia World Ltd	Product Innovation International Company
Composite Developments	Pyramid Water
CYCODA Ltd	Rainbow Confectionery Ltd
Design Mill	Raising Investment Co Ltd
Dreamtime Photo Art	Redmetal Vineyards
Elephanta Marketing Ltd	Refraction Marketing Ltd
Eyewear Design Ltd	Road Runner Meats
FBC (Frozen Babyfood Company)	Sanford New Zealand
Fernz Ltd	Sarwar Enterprises Ltd
Garelja Bros	Serendipity Olive Company Ltd
General Marine Services	Shield Productions Ltd
Global Routes Music 2000 Ltd	Simunovich Olive Estate
Global United Enterprises Ltd	Slick 50 NZ Ltd
Goldwater Springs Bottling Co Ltd	Slitting and Rewind Services (NZ)
Green Food Company (Fiji) Ltd	Stark Innovations Ltd
Guru Toys	Stylizzimo Ltd
Healthy Solutions Ltd	Sweet Street Ltd
Hermans Confectionery Ltd	Taranaki Watercress Gardens
Home Style Chocolates	Tasman Bay Olives Ltd
HYPER NZ Ltd	The Electronic Commerce Network
Images In Space Ltd	The Great Hage Company
Indiana Publication (NZ) Ltd	The Great NZ Christmas Cake Company
Jenscart Ltd	The Leather Pouch Company
KAS New Zealand Pty Ltd	The Nut Factory
Kathmandu Ltd	The Sweet House Ltd
King Exports	The Thames Natural Soap Company
KiwiCanz	The Village Press Ltd
Klassic Ice Ltd	The Waiheke Olive Oil Co Ltd
KM Group	Tomen (NZ) Ltd
Kris Trading Company Ltd	Unifone Ltd
Lake Hayes Vineyards Ltd	Universal Mail New Zealand
Leather Associated Products Co Ltd	Van Dyck Belgian Specialist Ltd
Livingstone Estate Ltd	White Cliffs Brewing Company
Ludowici Ceelon Ltd	White's Packhouse
Mac Cure Seafoods	Wildside Records
Maclon Industries NZ Ltd	Wood Masters Ltd
Manukau Colour Labs Ltd	Woodhouse Apparel Ltd
Matthews Nurseries	Yonder Music Ltd
Meadowcroft Farm	
Medbook Ltd	
Natural Way Ltd	

## Bar codes down under

EAN New Zealand's technical staff were recently foxed by two bar code samples that they could not identify at first.

The samples from new products had been sent to us for verification, but wouldn't scan at all. Our attempts to identify the symbology – a necessary first step in diagnosing any faults – also failed. The "start" and "stop" symbols were unlike any other symbols our staff had seen before, yet they looked strangely familiar.

"I just give the manufacturers the numbers and they send me packaged goods," the product importer said of his French supplier. "Their bar codes have always worked in the past."

Intrigued, we asked for a sample of an existing product. The bar code on the current product looked as strange as the other two, but it scanned! Even more confusing, the verifier identified it as an EAN-128 bar code. "Impossible," we thought.

Then the penny (er, the franc) dropped. The bar code symbol itself was printed upside down, but with the numbers along the "bottom" and applied correctly to the product. Since scanners read in both directions they can easily accommodate upside-down bar codes, but things are not so simple for humans trying to manually decipher them.

Once all that was sorted out, the reason for the two bar codes not scanning was identified: bar-width errors.

For the record – water may rotate in different directions down the plughole on either side of the Equator, but inverting bar codes between hemispheres is definitely not necessary!

### All the news not fit to scan

**The scene:** a busy Wellington supermarket.

**The cast:** an EAN New Zealand staff member and a young sales assistant.

**The prop:** a copy of the daily newspaper.

**Plot outline:** the bar code on the newspaper cannot be scanned, because the paper developed a fold during the printing process. The sales assistant refuses to type in the human-readable numbers, as he doesn't know whether some of the numbers are missing. The sales assistant refuses to scan another copy of the same newspaper, because he doesn't realise the bar codes on identical products are identical. The sales assistant calls for help from his

supervisor, during which time the next customer in the queue leaves the shop cursing (and without buying his beer).

**Climax:** embarrassed sales assistant, two apoplectic customers, one lost sale, degraded reputation of store.

**Moral:** ensure that retail staff know that bar codes have 13 numbers, and that the bar code on one unit is the same as that on an identical unit of that product.

### If at first you don't succeed, make it up!

Superficially, the bar code below (generated overseas, we hasten to add) looks spot-on. It is recognisable as an EAN ITF-14 bar code, used on trade units, with guard bars surrounding the symbol and the H-shaped gauges that one expects to see on this type of bar code.

But the trained eye will see that the printer who created this bar code got a few things wrong:

- The symbology used to encode the bars is 128, not ITF.
- A second check digit has been encoded after the check digit.
- The letters "TUN" are also encoded.
- The bar height was not the specified minimum 32mm.

If this bar code had made it into the marketplace, this EAN member would have had some rather confused trading partners. With an unnecessary extra digit and three letters in what should have been a 14 digit number string, no software could have used that data. The bar code was useless. Luckily, this member got the bar code verified and the problems were fixed.

You can ensure that your bar codes are up to standard by using EAN New Zealand's verification service. Send your samples to Verification Service, P O Box 11-110, Wellington.



### FOR MORE INFORMATION...

... on getting your bar codes verified contact Robert Turner on (04) 801 2896 or Raman Chhima on (04) 801 2895.



Don't be fooled by phoney "health wars"

The health care industry worldwide is the subject of an aggressive marketing campaign by a niche health sector numbering organisation.

Described by EAN International as an "unprecedented attack", the campaign by the Arizona-based Health Industry Business Communications Council (HIBCC) contains many statements that are dubious and misleading.

HIBCC has been losing market share in its relatively small health niche<sup>1</sup>, and is encouraging the wider health industry to overlook the proven attributes of the EAN·UCC system.

EAN·UCC has already been embraced in global health care as the cornerstone for efficient supply-chain integration and collaboration. That is because the EAN·UCC system brings the same advantages to the health industry as it does to every other business.

Increasingly, niche standards are being abandoned as the need for collaboration across the supply chain calls for universal standards.

These figures from Australia show the dominance of EAN·UCC bar codes over the HIBCC product:

- In Australia, EAN-13 is mandated for all prescription and over-the-counter (OTC) drugs and has been adopted by the New South Wales Healthcare Department for all products (see table below).
- The Japanese Federation of Medical Devices Associations (JFMDA) has recently adopted the EAN·UCC system as the single industry standard. This decision was based on "industry trends in the US and Europe" and the view that standards applicable only to the "medical care industry will not be acceptable".

In other countries:

- **Austria:** Most pharmaceutical producers are EAN members, and 85% of products representing 95% of revenue are EAN-numbered. All OTC drugs are coded with EAN-13.
- **China:** All medical products use the EAN·UCC system and bear EAN-13 bar codes.
- **Czech Republic:** The industry has voluntarily adopted EAN-13 numbering and bar coding.
- **France:** The directors of the Private and Public Hospital Associations have recently recommended the adoption of the EAN·UCC system.
- **Germany:** The health care sector is moving to adopt the EAN-128 standard, having already adopted EANCOM messaging.



NSW Health Peak Purchasing Council bar code audit results				
	Medical & surgical devices	Pharmaceutical items	Hardware & maintenance items	Grocery items
EAN·UCC bar code on label	33%	85%	48%	78%
HIBCC bar code on label	28%	Nil	Nil	Nil
Both EAN & HIBCC	1%	Nil	Nil	Nil
Other proprietary system	5%	1%	3%	1%
No bar code	33%	14%	49%	21%
Total	100%	100%	100%	100%

According to surveys by the US Health Industry Distribution Association, in 1995 77% of US medical and surgical products sold in the USA were marked with the HIBCC bar code, but that figure fell to 56% in 1999. EAN·UCC's share, meanwhile, has risen from 23% to 44% and continues to climb. In the rest of the world HIBCC has a much smaller market share and limited use. Audit conducted by NSW Health PPC in March 2001.

Over the next several issues, SCAN will keep its readers informed on the latest developments in health care uses of the EAN·UCC system.

PSM Healthcare, the first company in New Zealand to enter the Accreditation Programme



PSM Healthcare was formally accredited on 3 December, to become the country's first accredited manufacturer.

As a manufacturer of pharmaceutical products as well as toiletries for general sale, PSM is accustomed to the rigid disciplines of impeccable quality control, and this showed in its rigorous approach to the accreditation. Despite having completed the programme's requirements several weeks ago, PSM chose to defer formalisation of the accreditation until it had managed the reduction of some older stocks of pre-printed packaging.



Accreditation Project Manager Phil Morrish says that the company is "very pleased" to have achieved fully accredited status. "We believe in quality systems and extending the philosophy into the supply chain of our products was a logical extension of what we already do in our manufacturing."

EAN Accreditation Consultant Owen Dance says that PSM is "a class act. They preferred to get it right, even when the delay meant that they missed out on being the first company in the country to be fully accredited, but they are the first manufacturer to get there."

FOR MORE INFORMATION...  
...about the EAN Accreditation Programme contact Owen Dance on (04) 801 2894 or Hayley Moon on (021) 711 169.



## EANnet upgrade adds new features

EANnet v2.0 is the new on-line data synchronisation catalogue for all industry sectors throughout Australasia.

EANnet provides a single, standardised source of accurate information for trading partners in every industry and at every step of the supply chain, and therefore provides the data integrity needed for electronic trading.

Based on global EAN·UCC standards, EANnet enables trading partners to gain secure access to commercially sensitive information including pricing, promotion, trading terms and the locations of products and services.

As the Efficient Consumer Response team said last year, accessing commercially sensitive data via EANnet could save an estimated \$50 million in Australia and potentially a further \$10 million in New Zealand.

Those estimated savings would arise from eliminating purchase order and invoice errors, plus the further benefit of acting as the central catalogue for other e-commerce applications, benefiting suppliers, retailers and wholesalers. The significant new features of EANnet v2.0 include:

- increased speed and performance
- rich and comprehensive catalogue content (more than 180 static data fields and 60 price and promotion

fields, including customer-specific price and promotion information)

- full replication of paper-based buying forms such as the Universal Buying Form (UBF), including price and price-related information
- "one-to-many" automated broadcast of item, price and promotional changes between suppliers and buyers
- ability to upload and download product images (in the .jpg format) and other attachments such as symbol verification reports, material safety data sheets and instructions of use in a single step
- browsing or searching across publicly available item information, images and attachments
- adoption of Universal Standard Product and Services Classification (UNSPSC) codes for accurate international standardisation of product classifications.

These advantages make EANnet the new and essential foundation for accurate business-to-business electronic commerce in this region. To date, more than 100 companies have registered for EANnet v2.0 within Australia. More than 40% of the top 60 grocery vendors have registered



for EANnet, in addition to the four major grocery retailers/wholesalers.

Many of the Australian companies that have registered for EANnet also have business interests in New Zealand and are looking forward to the day when EANnet is deployed here.

The EAN organisations on both side of the Tasman, in conjunction with industry representatives, have found that only a few simple changes are required before New Zealand companies are able to take full advantage of the services of EANnet v2.0.

EAN New Zealand is working with its members to further document the grocery industry requirements in New Zealand to ensure that EANnet is fully capable of meeting this country's requirements. Following a planned pilot project to test EANnet among a small number of New Zealand retailers and manufacturers, EANnet will become available to New Zealand firms.

### FOR MORE INFORMATION...

...on the EANnet pilot contact Robert Turner on (04) 801 2896 or email [robert.turner@ean.co.nz](mailto:robert.turner@ean.co.nz)

## New XML standards: global gateway to B2B Internet trade

EAN International, the Uniform Code Council, and the Global Commerce Initiative (GCI) have produced the world's first complete and open standards for e-business.

The standards provide users with a global language of e-business to conduct efficient Internet-based electronic commerce.

XML is especially suited to small and medium-sized enterprises, which can move to e-business transactions using a standard Web browser, and therefore with low capital investment and quick speed to market.

The EAN·UCC XML Schemas, jointly developed by EAN International and UCC and based on the GCI's Global Commerce Internet Protocol, specify five key business transactions: Item Alignment, Party Alignment, Order, Despatch Advice, and Invoice, as well as extensions for Allowances and Charges and Payment Terms. XML standards provide global users in all industries with an open e-business solution that can fully and

efficiently exploit the power, speed and reach of the Internet.

The XML standards were developed with strong user involvement and global support, including GCI member companies. EAN International and UCC developed this first suite of XML standards to be the foundation of a global, multi-industry solution that will enable all companies to streamline their e-business processes via improved interoperability and efficient data transmission.

Two successful global pilots were conducted with some of the world's leading companies and exchanges to test the robustness of the XML standards and their ability to seamlessly communicate with Electronic Data Interchange (EDI) systems.

Peter Jordan, Director of IS Strategic

Projects at Kraft Foods International said, "These XML Schemas will provide all companies, large and small, with base models that will help them better understand the simplification of the business processes.

"This will enable better maintenance of the standards, reflecting global business needs in a much faster way."

Ron Griffin, Senior Vice President and Chief Information Officer of The Home Depot added: "Our ability to interface through the Internet with both companies and exchanges has been broadened and set on a common ground. This is essential for truly collaborative commerce."

### FOR MORE INFORMATION...

...on XML, visit [www.ean-int.org](http://www.ean-int.org)



## What's different about XML?

EAN·UCC XML standards offer solutions to some of the major challenges of Internet-based business-to-business (B2B) electronic commerce.

Based on a core set of XML schemas, the new-release XML standards will allow broad data exchange over the Internet and can be used as they are for fast-moving consumer goods (FMCGs) globally. These standards will address real-world business issues, which include:

- the current lack of data synchronisation among trading partners for Item, Party and Price, and other processes
- the complexity and redundancy inherent in follow-up business processes resulting from lack of data synchronisation
- the opportunity to streamline business transactions when data synchronisation is achieved (also referred to as Simpl-eb, and initially consisting of Purchase Order, Despatch Advice and Invoice).

Initially, the data synchronisation and Simpl-eb processes have been developed for FMCGs such as grocery, health and beauty-care products, and perishables. These initial standards will provide the basis for future message development in other industries.

The XML standards do not relate directly to traditional EDI in the sense that they are not a one-to-one mapping to existing segments, data elements and code values. A bridge that enables transparent conversion between traditional EDI and XML will be built, allowing companies with different communication protocols to conduct seamless electronic trade.

The EAN community will work with software providers to ensure that their products support EAN·UCC XML standards. The data content of the new EAN·UCC XML standards is independent of software vendors.

Companies can preserve their investment in traditional EDI (e.g. EANCOM®) and may gradually implement

the XML standards where this makes business sense.

In contrast to SGML or XML, HTML is a specific mark-up language that contains a fixed set of elements and attributes. HTML has a limited repertoire of structural tags like headings, lists and links, some tags for encoding formatting information like text attributes and layout, and very few tags for encoding types of information content.

XML gives the Web a much stronger capability for electronic commerce, making it possible to encode information with meaningful structure and semantics in a very accessible notation that is both human-readable and readily processable by computers. While XML 1.0 adds no new modelling capabilities beyond those that have been available in SGML for over a decade, the simpler XML syntax makes it much easier for non-specialists to participate in the design of new mark-up languages.

## RFID

# Green light for GTAG testing

The promise of the EAN product GTAG becoming the global standard for radio frequency identification (RFID) is a step closer, with authorities on three continents giving the go-ahead for compatibility tests in the requested frequency bands.

This is a big turnaround from what one observer has called "a wall of absolute opposition about a year ago". Patient lobbying led to the breakthrough with the radio spectrum authorities in "Region One", which covers Europe, Africa, the Middle East and the Russian Federation.

"This is a significant breakthrough," says Federico Franciosi, Global e-Commerce Standards General Manager at EAN International. "The agreement to proceed with detailed compatibility testing is a key requirement if we are to achieve our goal of a truly global standard."

"Furthermore, we have been able to convince (the authorities) that there is a concrete market demand for RFID in logistic applications."

GTAG is the EAN·UCC trademark for RFID applications that are compatible with all other EAN systems. Because they can be read and updated remotely, RFID tags are replacing bar codes for some applications, and will extend the use of the EAN system for applications where bar codes are not practicable.

There had been concern about GTAG equipment potentially interfering with other users of the same frequency range

(865-868MHz), but "our encouraging preliminary testing and the positive collaboration with wireless audio devices and cordless telephone manufacturers have shown that we truly seek to be fully compatible with existing users of that frequency band," Federico says.

"We still have many hurdles to cross and there is much work ahead of us, but we are ready to meet those challenges in order to meet our users' urgent need of truly global RFID standards," he says.

### FOR MORE INFORMATION...

...about GTAG contact Raman Chhima at EAN New Zealand on (04) 801 2895 or email [raman.chhima@ean.co.nz](mailto:raman.chhima@ean.co.nz)

## RFID tags track plastic containers

RFID tags are the centrepiece controlling the movement and use of reusable plastic containers at Georgia-Pacific in the United States.

The containers have 15Mhz RFID tags built in. The containers enable fruit and vegetables to be packed by the grower and be displayed in the store without unpacking – no more manual unloading of

cartons or disposal of used or soiled packaging. When the produce container is empty, it is sent back to Georgia-Pacific for cleaning and reuse.

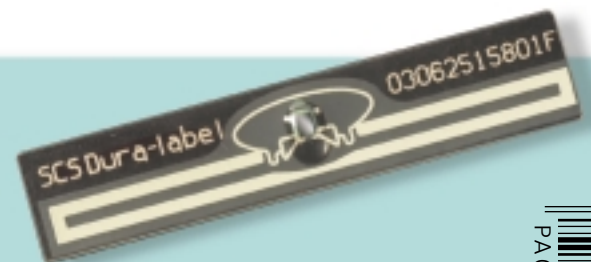
The tag on each container can be read from up to five metres' distance while moving along high-speed conveyors, passing through doorways, resting in fields, loaded on trucks and in groups of 100 or more when stacked on pallets – even when loaded with fresh produce.

The tags' read-and-write features enable Georgia-Pacific to decide what information should follow the containers on the RFID tags, and what information should be kept in databases.

Now that the tags are in the system, everyone along the supply chain can use them if they wish. Equally, the retailer can make sure the first produce into the system is the first to go on the shelves.

### FOR MORE INFORMATION...

...on how Georgia-Pacific is using radio tags visit:  
<http://home.intermec.com/eprise/main/Intermec/Content/About/TechnologyPages/RFIDSubpages/Article>





## Images in Space

Specialists in Data and Image Management

### Product Photography

Whether you require high resolution images for advertising, or small files for Space Management or e-commerce web sites, we can do it all while your products are in our studio.

### Product Measurement

Every product that is photographed for Space Management is measured to international standards and the data entered into our on-line Database.

### Data Distribution

Log in to our web site and access the New Zealand Space Management Database (used by the entire grocery industry) or our vast collection of high resolution images for print.

Contact us on the following:

Phone: (09) 4771023

Fax: (09) 4731320

Email: [barry@ImagesInSpace.co.nz](mailto:barry@ImagesInSpace.co.nz)

Web: [ImagesInSpace.co.nz](http://ImagesInSpace.co.nz)

Member of EAN New Zealand



## MEMBER PROFILE

### A company that cares about your image(s)

From a purpose-built home office on Auckland's North Shore, a high-tech business adds over 4,000 new and updated products to its database every year. That's one product every half hour of every working day.

For nearly four years Images in Space Ltd has been providing images and product data to the grocery industry, many of the oil companies and a pharmacy chain for use in their space management systems, home shopping websites and print advertising.

Photographic images of products (together with precise measurements) are vital to space management, because they help fill shelf space efficiently while showing products to their best advantage. In the electronic age, high-quality images "stock" on-line retail stores.

Images in Space has over 35,000 images, managed in-house by a custom-designed database and uploaded to its website.

The company's initial focus was on space management, but Images in Space has always identified the benefits of capturing a high-resolution image of every product, so that it can be made available for print and websites.

Images and product data are uploaded to Images in Space's extensive website to

distribute to users. The website is integrated with the leading space management software packages, and the list of subscribers reads like a "who's who" of retailers and manufacturers.

"The key to our success is combining solid technical expertise with a focus on highly efficient systems and a strong desire to provide excellence in customer service," says Managing Director Barry Pyle.

High-resolution images help with space management and with print advertising.

Images in Space Ltd is not just for the grocery industry. The images and product information help retailers (and their suppliers) who are doing business electronically, by ensuring data integrity and data alignment among trading partners.



### First for Adhesif

New Zealand's first fully accredited company is Adhesif Print Ltd of Auckland, whose accreditation was formalised on 6 November 2001.

Commitment to quality is a cornerstone of policy and practice at Adhesif Print, which has been ISO9002-certified since 1994.

Adhesif Print is a leading manufacturing printing company of self-adhesive labels and is committed to technology, quality and customer service.

With these objectives, accreditation with EAN was sought to produce bar codes of the highest standard possible to the benefit of its clients. Its technology of the latest scanners and verifiers ensures bar codes are being produced to a consistently high level.

Adhesif's excellent reputation as one of the most modern and efficient label manufacturing facilities in the world is second to none.

EAN New Zealand Chief Executive Margaret Fitzgerald is delighted with Adhesif Print's accreditation and congratulates it on its achievement. "The advent of mandatory verification testing in the New Zealand grocery market means that any accredited company now has an advantage over non-accredited

competitors, so full marks to Adhesif and the others that have taken the initiative early," she says.

EAN Australia has fully accredited one company, with two more awaiting completion of the formalities and 11 others undergoing the programme. In New Zealand three other companies have begun the programme and early in the New Year accreditation of 11 sites will be undertaken by one of the country's major food manufacturers, and over 50 companies have expressed strong interest in becoming accredited in the next financial year.

Ensure your company quality systems will enable you to save time and money in producing bar codes. Become EAN accredited.



#### FOR MORE INFORMATION...

...contact contact Owen Dance on (04) 801 2894 or email [owen.dance@ean.co.nz](mailto:owen.dance@ean.co.nz) or in Auckland contact Hayley Moon on (021) 711 169 or by email [hayley.moon@ean.co.nz](mailto:hayley.moon@ean.co.nz)



# 10 easy steps to make better bar codes

- 1 **Be sure to verify.** Most scanning problems can be avoided by using the verification process. Remember that scan-testing is not as useful as verification. (See the feature articles on verification.)
- 2 **Use simple numbering schemes.** For ease and simplicity of scanning, use the shortest possible encoded fields even if a directory file is required. Examine your current numbering schemes to see if they can become more efficient. Many users require labels containing vendor, style, size, colour, price and so on, creating the need for many characters. Ideally, a short SKU number should be created and encoded to portray all of the data. The longer, human-readable information can still be printed as required.
- 3 **Double-check the check digit.** If any of the numbers preceding the check digit are changed or added, the check digit must be recalculated. Refer to EAN manuals, or you can calculate the check digit on-line ([www.ean.co.nz/services/check\\_f.html](http://www.ean.co.nz/services/check_f.html)).
- 4 **Match bar code density to the application.** The majority of EAN applications use bar code media with an "X" dimension (narrowest printed bar) ranging from 0.264mm to 1.016mm. Just as with the human eye, wider bars and spaces are easier to interpret and are less subject to hostile conditions like voids and specks of dirt. For the most effective and reliable scanning, implement with the lowest possible density (larger "X" dimension).
- 5 **Use the right scanner.** Ensure that the resolution of your scanner is matched to the "X" dimension of the symbol it is reading. If you must scan a variety of narrow "X"-dimension bar codes, you probably need a non-contact scanner. That is because moving-beam scanners are much more forgiving, and therefore one model will suffice for a range of bar code magnifications.
- 6 **Get the bar code height right.** Avoid reducing the height of the bar code. Truncation requires the operator to re-present the symbol to the scanner more frequently, wasting time at check-out or elsewhere in the supply chain. Refer to our manuals for correct bar code heights.
- 7 **Use carbon-based inks where possible.** Although not mandatory, carbon-based inks often provide superior scanning performance. Because they are better at absorbing light, the light reflected from the bar code's spaces is relatively brighter, providing better contrast.
- 8 **Select the correct media and its components.** Define the label requirements including shelf life, the number of times to be scanned and the scanning environment, then seek proper advice. Opacity must be sufficient to ensure that background surfaces don't interfere with the scanner's ability to read the bar code. When labels produced by thermal transfer must be scanned many times by wands or light pens, the encoded bars tend to be scraped off the surface. Technological developments are addressing this problem. Fundamental to the success of this printing technique is the marriage of compatible inks, ribbons and label substrates.
- 9 **Get the light margins (quiet zones) right.** Light margins are the areas in front of and trailing the first and last printed bars, and must be free of any markings. They must be the appropriate width for the type and size of bar code you are printing.
- 10 **Use system-oriented suppliers.** Deal with suppliers that have extensive systems experience as well as in-depth knowledge on bar code and other automatic identification technologies. Be certain that your suppliers can address both hardware and software issues. The significant issues that must be considered are "who needs what data and when?", "how and where will we capture the data?" and "what are our computer system's capabilities?".

## FOR MORE INFORMATION...

...contact Raman Chhima on (04) 801 0833 or email [raman.chhima@ean.co.nz](mailto:raman.chhima@ean.co.nz)

# EAN meeting increase in demand

A logistics and supply chain professional replaces Alan Carlson at EAN New Zealand's Wellington office to meet the growing needs of our expanding membership, increased demand for verification services, and requests from members for consultancy services.

Rob Turner has joined the Membership Services team in Wellington, fresh from his experience in implementing an on-line information service for the United Kingdom retailer Safeway and its suppliers.

"Rob's presence will expand the capacity of EAN New Zealand's verification service, and Rob will also facilitate the implementation of the EANnet service in New Zealand," says Chief Executive Margaret Fitzgerald. "Rob's knowledge and experience can be utilised by our members to improve the efficiency of their supply chain and to trade more effectively with other organisations."

Rob has had experience in the retail, transport and construction industries in the United Kingdom, and earned a BSc (Hons) degree in Logistics and Supply Chain Management at the University of Huddersfield in England.

## FOR MORE INFORMATION...

...you can contact Rob Turner on (04) 801 2896 or by email [robert.turner@ean.co.nz](mailto:robert.turner@ean.co.nz)



# The Tipping Point – Malcolm Gladwell

Reviewed by Dr Luciane F Bryant, EAN New Zealand

Recently at the Marketing, Market Research and Technology conference in Wellington, two of the key speakers quoted The Tipping Point by best-selling author Malcolm Gladwell.

Intrigued, I decided to review the book for SCAN readers.

Gladwell tackles “tipping trends” as diverse as marketing case studies (why did Hush Puppies go from the brink of product extinction to a major success in the space of two years?) to complex social phenomena (why did New York City’s crime rate decline so considerably during the 1990s?).

He offers a fresh approach compared with the more traditional social, economic and demographic explanations. New social trends (the transformation of the unknown into major hits in popular culture) are like epidemics in action – firstly there is a sort of contagious behaviour, secondly there are noticeable changes and thirdly these changes happen in a short period – the same three principles that define how flu attacks every winter, Gladwell says.

Gladwell identifies three types of people that can make “epidemic behaviour” happen: the connectors, the mavens and the salespeople.

The connectors are people who know lots of people from a variety of backgrounds and subcultures. They have an instinctive and natural gift for making social connection and an uncanny genius for being at the centre of events.

Connectors see the possibilities, while most of us are busy choosing who we would like to know and rejecting those who don’t meet our standards.

While connectors are people specialists, writes Gladwell, the mavens are information specialists. They accumulate knowledge and are the ones who keep the market honest. “They are not just passive collectors of information, they also want to tell you about it and are quite effective in doing so. Mavens are both ‘teachers’ and ‘students’ – always searching for more information to add to their formidable database. They are really information brokers, sharing and trading what they know.”

The third group are the salespeople. They persuade people to do something – even those who are unconvinced of what they are hearing. The salespeople persuade with both verbal and non-verbal cues, and they try to harmonise with people they are communicating with, according to Gladwell.

The book is full of examples, quoting case studies as diverse as the men who sparked the American Revolution, Sesame Street, and the Wunderman-versus-McCann Erickson showdown over the Columbia Record Club account.

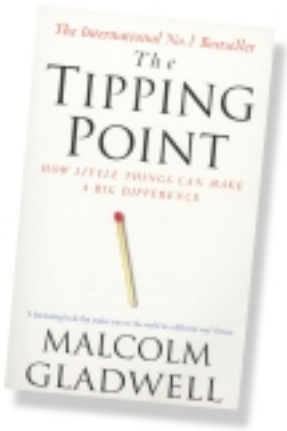
Gladwell suggests that there are three major ways for “tipping” i.e. turning around trends:

- Concentrate resources on a few key areas.

- Reframe the way you think about the world and test your intuitions.
- Find and reach those few special people – the connectors, mavens and salespeople – who hold social power and engage their help to change the course of social epidemics. With the right push in the right place, things can be tipped.

The book is easy to read, and while it does not go into any of the subjects in depth, it is a must for marketers and managers. It can be bought in all major bookstores in New Zealand.

Luciane Bryant is EAN New Zealand’s Strategic Development Manager and Senior Consultant in marketing/market research and communication. She has a variety of experience in a range of industries, and has worked in small organisations and multinationals.



## FOR MORE INFORMATION...

...on EAN Consulting Services, or how she can assist you please contact Luciane on 04 801 2893 or [luciane.bryant@ean.co.nz](mailto:luciane.bryant@ean.co.nz).

## KEY EAN NEW ZEALAND INDICATORS

1 JULY TO 31 OCTOBER 2001

INDICATOR	STATISTICS
Number of new members processed	132
Number of reinstated members processed	5
Customer-service enquiries via 0800 number <sup>1</sup>	961 <sup>2</sup> (Average 13 per working day)
Hits on EAN website	167,847 hits (Average 41,960 per month)
Verification reports issued	426
UPC numbers issued to members	19
Number of public seminars run	Introduction to EAN-UCC System: 3 Printing and Designing bar codes: 3 Trading for Efficient Consumer Response: 1
Total number of attendees for “Bar code Basics – Introduction to EAN-UCC System” and “Printing and Designing Bar Codes” seminars <sup>3</sup>	Auckland 78 Wellington 26 Christchurch 34
Total number of attendees for the “Trading for Efficient Consumer Response”	Auckland 100
Overall level of satisfaction with the above seminars	97% “satisfied” to “very satisfied”

<sup>1</sup> 20 June to 19 October 2001.

<sup>2</sup> EAN receives at least the same number of enquiries through other phone lines or email.

<sup>3</sup> November 2001 Seminar Series.





## Sticky situation for pallet labels

We currently use a pallet label that we stick on the outwards-facing side of the pallet near the top. This way the forklift operator can still see it when the pallet has been picked up.

When we change to EAN labels, your location guidelines will require us to place the label in a position that will be covered by the fork's carriage. The label will be out of sight when it's being carried.

Why does EAN specify that location?

Brian Knight  
Old Fashioned Foods  
Auckland

## EAN NEW ZEALAND REPLIES

The guidelines recommend that the labels are placed at 400mm to 800mm above the floor, and a minimum of 50mm from the edge. This recommendation is a compromise between the needs of automated systems and the needs of humans.

For automated systems, the optimal location for both reading and applying logistics labels is as close to the floor as possible. Every pallet touches the floor, and therefore down low is the ideal location for scanning systems and for the machines that stick on bar code labels.

Human operators, of course, prefer not to have to bend too far to apply or read the labels.

The guidelines assume that forklift operators will scan the label before uplifting the pallet and will then either remember where to take it, or will have a warehouse automation system to provide instructions.

## Not a very super market

I thought I would share an experience I had recently at an outlet of a major supermarket chain. Of the 17 items I bought, five could not be scanned – and two of those weren't recognised even after being typed in.

Because of the delay caused at the check-out I was moved to the service counter, whose staff then ran around the shop looking for the goods to get a price. This had happened to the person in front of me as well.

This was about 9am and the shop was not too busy. Now I won't shop there during the busy period because I perceive long queues will await me.

Can you help them?

Paul Webb  
Infinity Solutions

## EAN NEW ZEALAND REPLIES

Yes, we can help. We can approach the manufacturers involved and offer advice and training to remedy the shortcomings in their bar codes, but to do that we need customers or store staff to tell us about the problems.

The best option is for manufacturers to participate in our **Accreditation Programme** or utilise **EAN Consulting Services**. Accreditation provides them with training and quality assurance to guarantee them (and their trading partners) that their bar codes will be perfect every time. EAN Consulting can assist with in-store surveys or identifying problems and providing solutions in relation to the supply chain.

# EAN New Zealand

is a leading support service of supply chain management.

Your company can form an alliance with us in the following ways:

## ACCREDITATION

Accreditation means your product ID system and bar codes are EAN New Zealand certified and therefore totally correct and reliable. You benefit from assured quality, improved supply chain management, enhanced confidence in your product among trading partners and the ability to produce your own product verification reports. For information, contact Owen Dance on (04) 801 2894 or email [owen.dance@ean.co.nz](mailto:owen.dance@ean.co.nz), or in Auckland contact Hayley Moon on (021) 711 169 or by email [hayley.moon@ean.co.nz](mailto:hayley.moon@ean.co.nz)

## SPONSORSHIP

Some of New Zealand's leading companies have been involved in EAN Seminar sponsorships because they understand the exposure their brand will get to our membership. Benefits include branding, sales and speaking opportunities. If your company is interested in finding out what EAN sponsorship offers, please contact Dr Luciane Bryant on (04) 801 2893 or by email on [luciane.bryant@ean.co.nz](mailto:luciane.bryant@ean.co.nz), or in Auckland contact Hayley Moon on (021) 711 169 or email [hayley.moon@ean.co.nz](mailto:hayley.moon@ean.co.nz)

## CONSULTANCY

EAN New Zealand offers its members a consultancy service to help them achieve the full benefits of the EAN systems, standards and protocols. The consultancy service offers a range of activities including assistance to become EAN accredited, supply chain management, documentation of business processes, in-house training, marketing, communications, market research and project management. For further information contact Glenn Powell on (021) 711 070 or email [glenn.powell@ean.co.nz](mailto:glenn.powell@ean.co.nz), or Dr Luciane Bryant on (04) 801 2893 or by email on [luciane.bryant@ean.co.nz](mailto:luciane.bryant@ean.co.nz), or in Auckland contact Hayley Moon on (021) 711 169 or email [hayley.moon@ean.co.nz](mailto:hayley.moon@ean.co.nz)

## VERIFICATION

Make sure your bar codes perform as intended. EAN New Zealand tests bar codes to the EAN·UCC General Specifications, which ensures bar codes will perform as required in different scanning applications. Don't let your bar codes become an unnecessary cost to your company. Get EAN New Zealand verification today by contacting Raman Chhima on (04) 801 2895 or email [raman.chhima@ean.co.nz](mailto:raman.chhima@ean.co.nz) or Robert Turner on (04) 801 2896 or email [robert.turner@ean.co.nz](mailto:robert.turner@ean.co.nz)





# Which company provides the most comprehensive selection of Mobile Data Solutions in the World?

## PORTABLE COMPUTERS (BATCH)

These units set the standard for portable data collection. They are light and easy to use, but also very rugged - so they can withstand rough handling and harsh environments. Once you have scanned the information you need, it can easily be downloaded to your PC or Local Area Network (LAN).

### Key Features:

- Highly versatile - the standard laser scanners read all popular bar codes from distances of 7.58cm.
- Added flexibility - our optional laser scanners read miniature bar codes to 2mm, and scan from distances of up to 4.5m with reflective labels.
- Easy to programme - using Microsoft Visual Basic (7400 only), C++; Borland C industry standard languages.
- Rugged and reliable - the units are water and shock resistant, and can survive repeated 1.5m drops onto concrete.
- One year warranty.



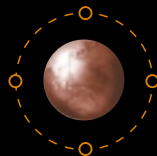
## PORTABLE WIRELESS

### TERMINALS & PERIPHERALS

Our range of Dolphin® RF (radio frequency) devices, accessories, peripherals and software enable you to create a wireless local area network (LAN) or integrate real-time data collection into your existing LAN. Alternatively you can use Dolphins in conjunction with wireless wide area networks (WAN).

### Key Features:

- Choice of industry standards - I.E.E.E.802.11b or WLIF Open Air®.
- Choice of scanners - which can read linear, 2D symbols and OCR; and image capture (including signatures and photographs).
- Easy to programme - using Microsoft Visual Basic (7400 only), C++; Borland C industry standard languages.
- Rugged and easy to use.
- Minimum one year warranty.
- Use in conjunction with wireless WAN, including GSM, GPRS, Mobitex and Tetra.



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