

Labeling and Bar Codes

A presentation to: OVOP Malawi

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Food : Labels & Labeling



What is a label ??

- A label is a paper, polymer or any material affixed to a container or article on which is printed a legend, information of the product, address etc.

...Label is defined by its usage

Most widely used label today are “Self Adhesive Labels”

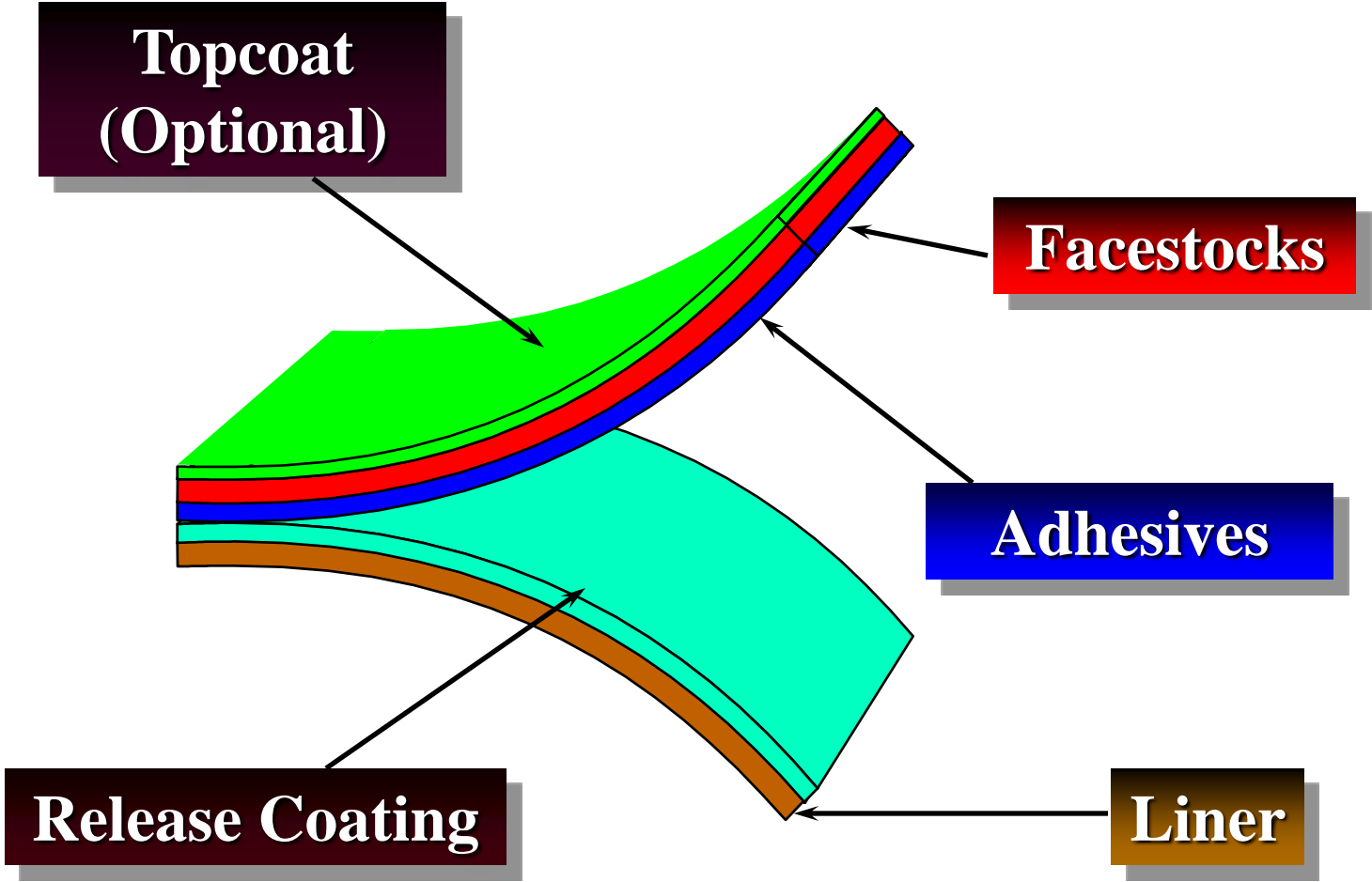
Self adhesive labels have the following construction

PRINT RECEPTIVE TOPCOAT – matt or gloss topcoats printable with graphic inks on flexo, letterpress technology using foils, screen, variable info printing by thermal transfer, laser or dot matrix techniques

SUBSTRATE – Coated paper, white or clear polyester, polypropylene, polyethylene, speciality materials like – destructible acetate, vinyl, voiding materials

ADHESIVE – General or special purpose adhesive based on application

LINER – 65gsm glassine or Kraft papers or PET film



Advantages of using a self adhesive label:

- Versatility
- Functionality
- Better End-Use Performance
- Capital and Operational Efficiency
- Simplified Operations

Food industry Labels

As in any industry, labels form a vital component of product packaging.



Features of Food industry labels

Food labels provide information from the manufacturer to the consumer.

- Provide information about the product so that the consumer knows exactly what they are buying
- Provide instructions for storage and preparation so the consumer is able to store and prepare the product safely
- Enable the consumer to make choices for dietary or other reasons
 - .. allow consumers to compare food products for value for money.

Typical food labels

* These are a legal requirement



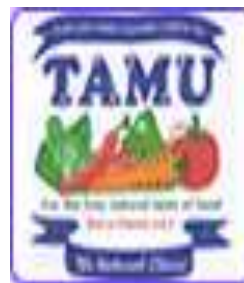
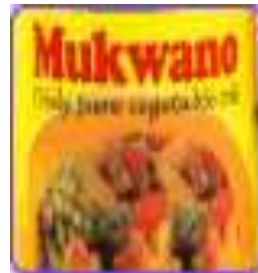
Label Types:

Product labels

A decorative label which is applied onto the food container, bottle, can or pouch that mentions about the brand , product name, illustration or product graphics.

This label ranges from regular papers to films such as polyester, polypropylene to high end clear labels that give no label look.

Basically a multi-coloured label, having graphics & various effects with a protective overprint coat or overlam.



Label Types:

Shipper Identification labels

Identification labels are functional labels that are applied on the shipper cartons which carry variable information about the product which includes:

- Product type
- Lot No & size
- Manufacturing date
- Country of Origin



This label is basically a plain paper label on which the variable information is printed on demand at site using a thermal transfer printer which is vital for the supply chain

Label Types:

Specialty labels

A specialty label caters to specified requirements either with respect to the label material or the application.

Some examples :

- Direct food contact label
- Low/refrigeration temperature label
- Promotional / offer label
- Tamper evident label
- Other Security feature label for countering duplicacy



Automatic Labeling

- Self adhesive label progress had paved the way for automatic label application.. a labeling experience
- Today label applicators, dispensors and print-n-apply systems are custom made to suit every budget, theme and requirement
- Striking features of these systems include:
 - a) Modular designs
 - b) Flexibility of multiple operations
 - c) Ease of setting & operating controls
 - d) Efficient labeling accuracy

Labeling Equipment Types

Depending on the application the various machine options

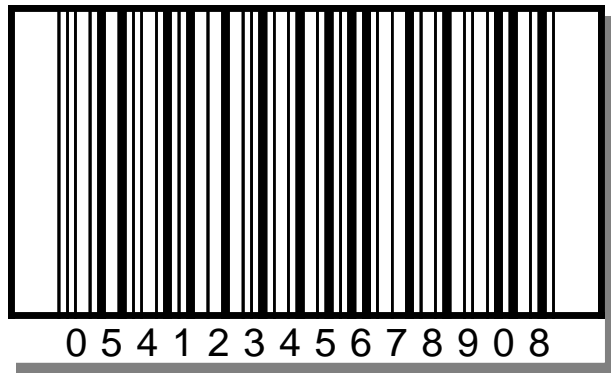
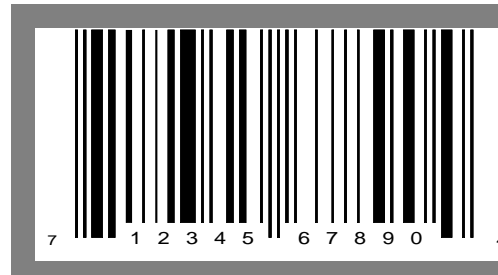
- Single side labeling – Flat/Oval containers
- Double side labeling – Flat/Oval containers
- 3 side labeling – square/rectangular containers
- Wraparound labeling– Round/square containers
- Top labeling
- L or U seal labeling
- Combo
- Pre-formed unfilled pouch labeling
- Pouch laminate labeling for FFS machines.



Bar Codes

Retail Bar codes

- 13 DIGIT GS1/EAN BARCODES



Relevance of Bar Codes to OVOP

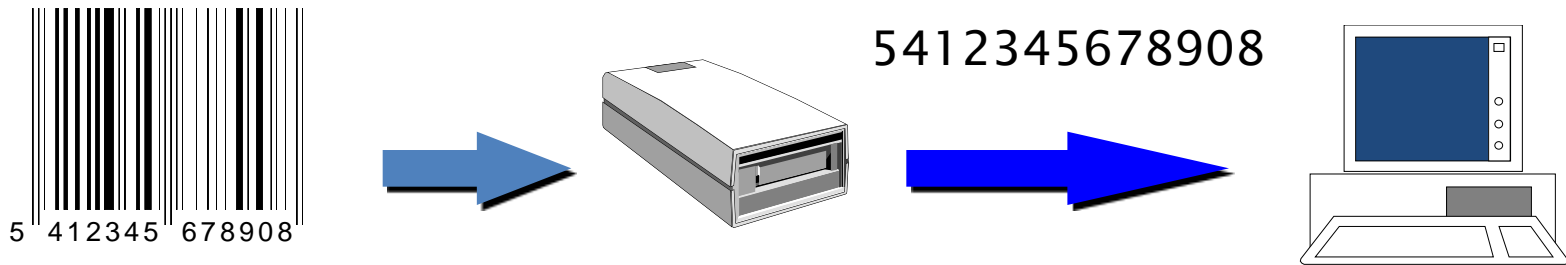
- The primary purpose of a bar code for Products is that it enables entry into Supermarkets locally and internationally.

READERS

- Different kinds of scanners



TRANSACTION PROCESS



- Identification Keys and other standard data are translated into barcode format and may be captured automatically by scanners. Scanners transmit data to computers for further processing.

BENEFITS

ASSOCIATED WITH RETAIL BARCODING IMPLEMENTATION SYSTEMS TO TRADE
AND INDUSTRY

Consumer Benefits

- No mistake at point of sale
- Fast checkout
- Fast and accurate service

Supermarket Benefits

- No price tags/inhouse bar-code costs
- Improve stock control
- Improve shelf space management
- Check productivity gains
- Accurate pricing
- Accounting savings
- Fast efficient services

Producer Benefits

- Retail acceptance-products accepted in supermarkets all over the world
- No price tags on brand names
- Feedback on product movement
- Feedback on new product performance
- Improved production planning
- Marketing strategy optimisation
- Product,price,promotion,place

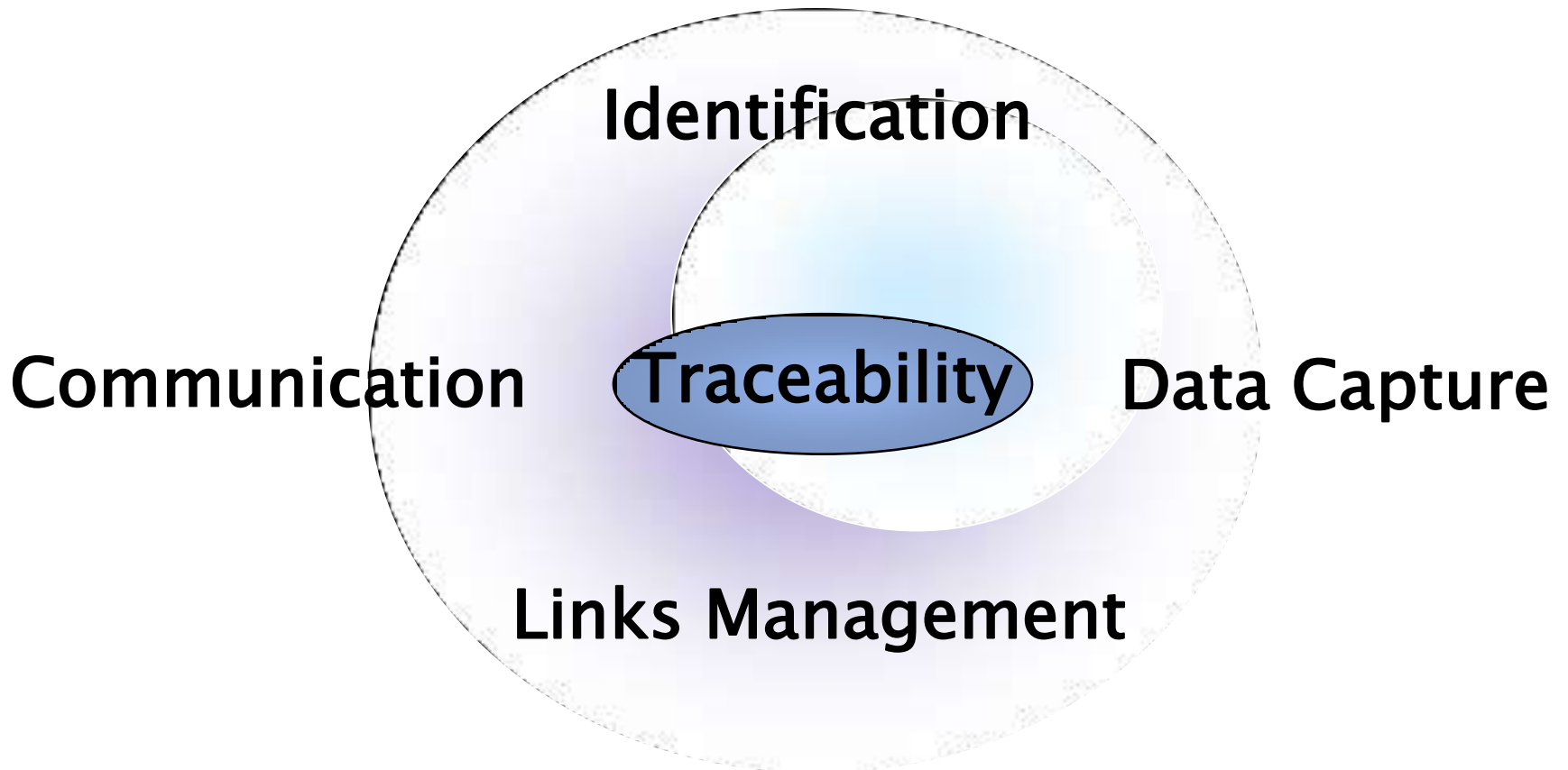
Process of Bar Code Creation

- ▶ Country Prefix Kenya 616 etc
- ▶ Company Code,Product Code,Check Digits
- ▶ Allocate codes to each product variant
- ▶ Convert the codes to the bars/Lines
- ▶ Put in the Artwork/Packaging
- ▶ Print to comply to required Standards
- ▶ Place the codes at the appropriate place on the packaging.
- ▶ Test/Verify that the codes will work

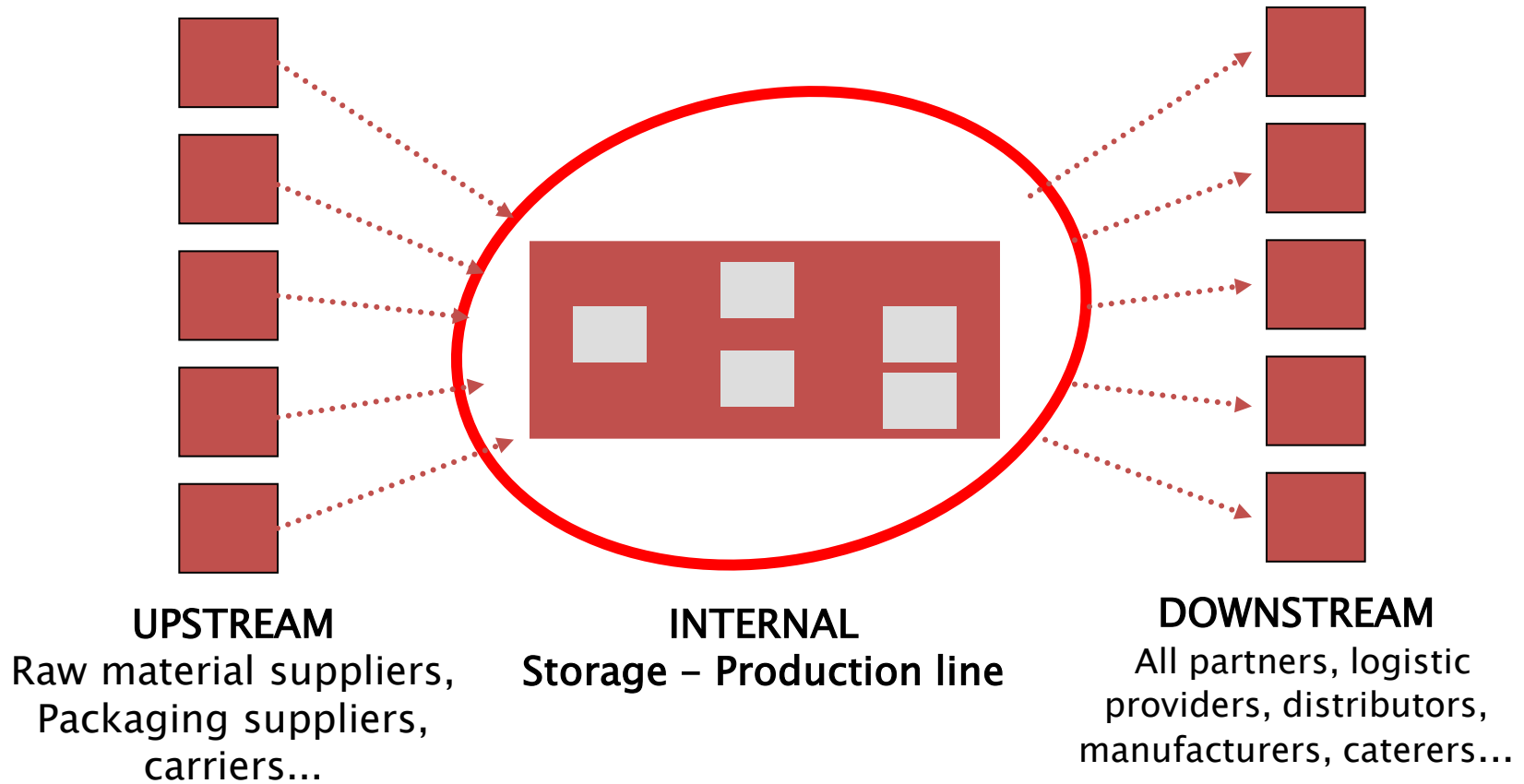
Market Driving Forces For Traceability

- Consumers Safety/Health / quality/security.
- Consumers want to be sure.
- Environmental concerns-Global warming.
- Global Competitiveness and Standards.
- Technology changes.
- Transport and logistics.
- Regulations/Directives.
- Address concerns real or imagined

Factors of Traceability



Traceability System Scope



Internal Traceability

- Within one company.
- Same geographical location.
- Interface to production management systems.
- Few privacy issues.
- Simple to implement - some companies have good systems.



Thank you for your attention!