Cost control is firmly at the top of the agenda for suppliers of consumer goods, and the product identification process is proving to be a potent weapon in managing factory and supply chain costs.

For global manufacturing organizations, reduced profits threaten investment in new products, new plants and new markets. Fuelled by currency exchange movements, raw materials and ingredient prices are volatile. Unstable energy costs affect manufacturing operations and suppliers alike, so that packaging costs continue to spiral, with significant rises in board, film, aluminium and steel-based materials. While prices have fallen back from the spikes of 2008, the growth of bio-fuel demand, the limits of agricultural productivity, the inexorable growth of the world’s cities and climate change all impact on the long-term upward trend. The era of ‘cheap food’ appears to be well and truly over.

Reduced consumer spending power, lower inventory levels by wholesalers and increased private brand activity have all contributed to a flattening of demand. So what strategies can the major manufacturers adopt to maintain profitability in troubled times?

- Firm up pricing, passing on cost increases or re-formulating pack sizes, in the hope that consumers will keep faith with superior products and trusted brands.
- Attack escalating factory costs by improving procurement practices, increasing operational efficiency, simplifying organizational structures and eliminating waste.
- Reduce packaging costs, adopting innovative technology and practices which can be deployed throughout the plant network.
- Improve supply chain efficiency, adopting just-in-time principles to reduce inventory costs and time to market.
- Reinforce and extend brand investment, positioning them to take advantage of any upswing in the market, while protecting the brand and products against counterfeit or “changed/reworked” items.

Every global manufacturing organization has adopted all or some of the above initiatives, so how can the Product Identification process contribute to reducing factory and distribution costs?

**Coding Retail Goods:**

**The Historical Perspective**

The Product Identification process was born out of international legislation requiring almost all food and drink products to display expiry dates. For some years the need to add date codes to packages was viewed merely as an additional manufacturing cost, but a
series of major food scares affecting such products as fresh and processed meat, seafood, baby food, ingredients, even spring water threw the question of product traceability into much sharper focus.

Retailers began to be more forceful in their demands for product code accuracy, levying fines and other penalties on suppliers guilty of date and packaging errors. Manufacturers began to realize that an effective Product ID and traceability process offers a measure of protection from such issues.

The sophistication of today’s advanced Product ID technology is reflected in increased levels of performance and reliability, enabling manufacturers to maximize their investment in the latest high-speed packaging machinery while delivering unprecedented levels of uptime. This helps global organizations increase the productivity of their lead plants, using cross-border ‘best practice’ where - as in the case of Markem-Imaje - proven equipment and software that can be easily integrated into the plant “network” is available and supported around the world. By optimizing the capacity of key production units, return on resources is improved, freeing up revenue for brand investment and market growth.

Today, the Product ID process plays a pivotal part in controlling the costs of manufacturing, labor, distribution, energy, packaging materials, inventory, product withdrawal and re-work. An efficient, resilient system can deliver savings in all these areas; poorly-performing coding and labeling can simply add to their cost.

The following examples – from the manufacturing plants of major brand owners around the world – show how careful attention to the Product ID function has resulted in reduced production and distribution costs, improved supply chain performance and product traceability.

Reducing the Cost of Coding

In a Latin America plant making stock cubes, soups and other prepared foods, the introduction of Markem-Imaje laser coding technology and their CoLOS software enabled this customer to meet product traceability legislation with clear, permanent coding on high-speed lines running 24 hours each day. With no consumables and exceptional levels of reliability, operating costs were substantially reduced and the new coding system will repay its investment within two years.

Eliminating Human Error

A major snack-food manufacturer created a Product ID management system for its plants in the Middle East. Enterprise-level code management software and Thermal Transfer Coders from Markem-Imaje ensures that each pack is correctly coded and each pallet load uniquely identified. Data flows directly to the production lines, eliminating labor costs and human error. In addition, the output of their busy plant can be readily monitored and analyzed to drive future efficiencies.

Minimizing Packaging Costs

In northern France, efficient on-line bar coding delivered big savings in corrugated case costs and increased manufacturing output for a household products plant. On-line case coding has provided the flexibility to cope with changing supermarket requirements while enabling the company to make daily savings of 500 per line in packaging costs through:

- Eliminating the cost of labels.
- Purchasing unprinted ‘generic’ cases using recycled board.
- Printing them ‘just in time’ in the precise quantities required with the unique product information.
- Reducing inventory overheads by stock rationalization.

Increasing Productivity

In Europe and the Far East, modern laser coding technology was used to replace hot foil coding of stick- and sachet-packed coffee products, achieving significant improvements in packaging efficiency and through-put. The new process eliminated:

- Consumable cost and replenishment stoppages.
- Delays in setting up new code formats between production runs.
- Time lost in maintenance and unscheduled downtime.
At the same time, packaging material costs were reduced by using the laser process to score the laminate materials eliminating the need to purchase expensive, ready-scored film.

So, careful selection and thoughtful implementation of a plant's coding and labeling systems results in a potent weapon to drive down and control operational costs. But sometimes, thinking outside the box can pay big dividends in sourcing the solution needed.

**The Product ID Process: New Ownership Options Reduce Outlay and Simplify Purchasing Procedures.**

Capital investment and procurement are two other areas where Product ID can deliver savings to global manufacturers. Partnerships with trusted suppliers have resulted in unorthodox but effective solutions which subtly re-define the traditional vendor/customer relationship.

**Streamlining the Procurement Process**

In Latin America, a global manufacturer introduced a scheme to integrate and standardize its procurement practices to drive purchasing efficiencies. Products and services are outsourced in a single transaction, resulting in reduced purchasing costs and faster, more consistent, project implementation.

In response to this initiative, Markem-Imaje provided a total Product Identification process, taking responsibility for the installation and upkeep of the printing equipment. This allows the on-site production teams to focus on manufacturing output, confident in the efficiency of its date and traceability coding.

In an uncertain economic climate, an upgraded or extended Product ID process becomes more affordable. The need for heavy capital funding is eliminated, and future coding costs are entirely predictable.

**Product ID: The New Basics**

Today's packaging engineer has a whole range of coding and labeling technologies to choose from. Laser, inkjet, thermal transfer, label print and apply... all have their place in satisfying the Product ID requirements a myriad of packaging types. The availability of Enterprise-level coding automation allows manufacturers to take a more holistic view of their coding and labeling operations.

So, here are a few questions to consider as part of your cost control and operational improvement initiatives.

- How flexible and future-proof is your coding process?
- Can it readily be expanded, re-configured or upgraded to meet future operating needs without significant re-investment?
- How much time is spent correcting product labels or reworking packaging?
- How do I improve my inventory turns?
- Is the equipment robust and reliable enough to withstand years of 24/7 production?
- And, once proven, can applications be established as ‘best practice’ for other manufacturing sites, simplifying the purchasing process and offering economies of scale in procurement costs?

If you’re unsure of - or dissatisfied with - the answers, talk to Markem-Imaje. You can be sure of objective advice based on thousands of successful applications, an unswerving determination to provide the ideal Product ID solution, and the services of a dedicated team to implement it, anywhere in the world.

For more information, please visit us at www.markem-imaje.com.