**Industry Trends**

The progression of packaging OEM’s demand is influenced by a wide range of factors, from year to year and also factors with a much longer-term influence. While the economy plays a central role in influencing the size and growth of the market, there are a number of other factors such as cost, time customized features, evolving technology, among others which can be seen as having a direct or atleast indirect influence on packaging demand irrespective of the performance of the economy. The information collected from analysis reports and surveys in the region of US and Europe indicate three broad concerns among others, i.e. sustainability, cost reduction and traceability.

Some of the trends and issues have a large impact on the future of packaging industry, reflecting customer expectations, or driving objectives-strategies of machinery manufacturers.

Product-brand-package proliferation and operational emphasis onsustainability in packaging, materials, and operations, in response to changing customer requirements and consumer demands for convenience is the need of the hour. Risk assessment, focusing on all aspects of safety in machinery design and operation, represents a core or essential requirement of customers. Particularly in regulated industries pharmaceuticals and foods in some categories), requirements for product-package traceability across all components of the supply chain.

Packaging machinery OEMs operate in a global packaging supply chain that faces increasing demands for sustainability. The common objectives of OEM’s that have incorporated Sustainability is to reduce customer’s consumption of packaging materials and ancillary products, Secondly reducing customers’ packaging-related con­sumption of energy and water and emissions of greenhouse gases (GHGs). Opportunity and innovation drive a successful business strategy based on sustainability for packaging machinery OEMs.

Cost Reduction is a prime focus in some industries such as automotive and beverage.

In Automotive Packaging , there are certain pain points which need to addressed : OEMs and suppliers have been challenged to quantify and track all packaging-related costs. Additionally, due to poor tracking mechanisms, OEMs can be charged multiple times for the same containers by their suppliers. : A significant percent (15%–20%) of packaging is lost during the life of the program due to limited tracking. Greasy and non-greasy containers are often mixed together and create excess costs for the suppliers. Suppliers have to expend significant effort in managing the different OEM requirements around container management.

Similarly beverage companies have concerns which needs to be focussed. They have constant need of new sizes, openings, textures and graphics to help avoid getting lost in the parade of new product launches. The packaging equipments are not flexible enough to handle different packaging types and sizes. Companies are increasingly mandating that equipment providers integrate machines with their facility wide control systems vendor. They high demand for packaging and equipment innovations and see the industry as lacking in this key area. In particular, they want innovation that will lead to more energy-efficient equipment; more flexible, forgiving and faster equipment; new packaging materials; and much faster speed to market with packaging designs.

These concerns can be seen as opportunities and solutions can be provided.

Communicating with these industries with an understanding that it is paramount that they continuously innovate and differentiate. Exploring ways to make machines more flexible. OEM’s need to consider exploring what machinery changes would be needed to adjust to these designs, and be ready to discuss options them. Using technologies in robotics, vision systems and machine learning to help machines adapt automatically.

Traceability protocols minimize disruptions, such as product recalls, which come at an immediate cost and often result in a loss of future sales and significant long-term brand damage. These are added to a food safety and quality management system to achieve two primary goals:

* Eliminate recalls by providing real-time data on all supplier materials, machinery, operators and processes.
* Minimize the number of products that are recalled when an issue is found by identifying only the specific product codes that were built with a faulty input or that followed a faulty process.

OEM’s need to play a major role when it comes to traceability requirements because existing systems vary widely in sophistication. A vast majority of companies have some form of a traceability system in place but the dynamics vary depending on the amount of information the system records, how far or backward in the supply chain the system tracks, technologies used to maintain records and the precision with which a system can pinpoint a product’s movement.

Design for sustainability, including some or all of the following:

* Disassembly of machinery, to provide customer with greater line layout flexibility and to aid in end-of-life remanufacturing or recovery, including parts and components.
* Reduction or elimination of empty container transport—for example, locating of bottle forming equipment closer to or in the same facility as filling lines to eliminate shipping empty bottles by truck.
* Use of more efficient shapes—for example, square versus round for more efficient shipping and storage.
* Use of bio-based polymer materials on your machinery

Packaging machinery manufacturers must develop and implement offensive and defensive strategies on both a domestic and global market basis, to serve current and potential. They must become “intimate” with customers to understand their strategies and requirements for packaging solutions. Calculation and communication of packaging machinery performance data must be realistic. A “total product” approach by “adding value” to all aspects of their interface with customers should be adopted.

With evolving technologies, the need to provide smarter solutions has become greater than before. Technological capabilities of telematics and its prospective impact on business relationships and OEMs are starting to make progress in identifying the right business model to derive bottom-line value from these offerings. Telematics can provide OEMs and customers with considerable and valuable data on assets, which can add significant value to optimizing R&D, investment decisions, manufacturing, and operations. This can be one of the approaches to address the concerns discussed.

In summary, a “customer driven” focus presents opportunities for manufacturers to align their objectives, strategies, and tactics with “marketplace realities” as perceived by customers. This is the essence of a core approach that will be needed to sustain current and build future levels of success and profitability.