



Packaging Market Outlook

Trends, Directions, Drivers

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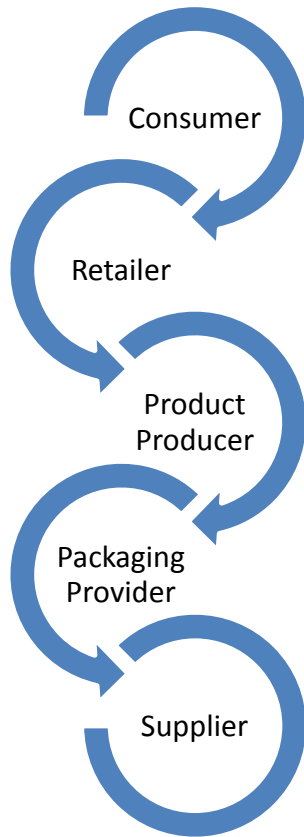
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Creating the Perfect Storm – The Value Chain



Value Chain Analysis is a useful way of thinking through the ways in which you deliver value to your customers, and reviewing all of the things you can do to maximize that value.

It takes place as a three stage process:

- **Activity Analysis**, where you identify the activities that contribute to the delivery of your product or service.
- **Value Analysis**, where you identify the things that your customers value in the way you conduct each activity, and then work out the changes that are needed.
- **Evaluation and Planning**, where you decide what changes to make and plan how you will make them.

Creating the Perfect Storm-Consumer Attitudes

Top Three Stats: Social and cultural factors impacting shopping habits:

1. Rurbanism
2. Give-A-Nomics
3. Commsumption

Creating the Perfect Storm – Consumer Attitudes

The Consumer Gap Principle

“While 65%-80% of consumers react positively to trend surveys, only 30% back-up their positive response with purchases aligned to the survey!”

Source: AC Nielson



What Problems are Created?

Retail Growth

Consumer Goods Retail Sales for 2011

- \$2.5 Trillion
- 54% through Mass Merchants

Retailer Revenues - 2009

- Non Store Retailers \$318 Billion
- Specialty Retailers \$701 Billion
- Mass Merchants \$1,269 Billion

Retailer Revenues - 2011

- Non Store Retailers \$405 Billion
- Specialty Retailers \$767 Billion
- Mass Merchants \$1,380 Billion

Source: BEA Data Base

Retail Pain

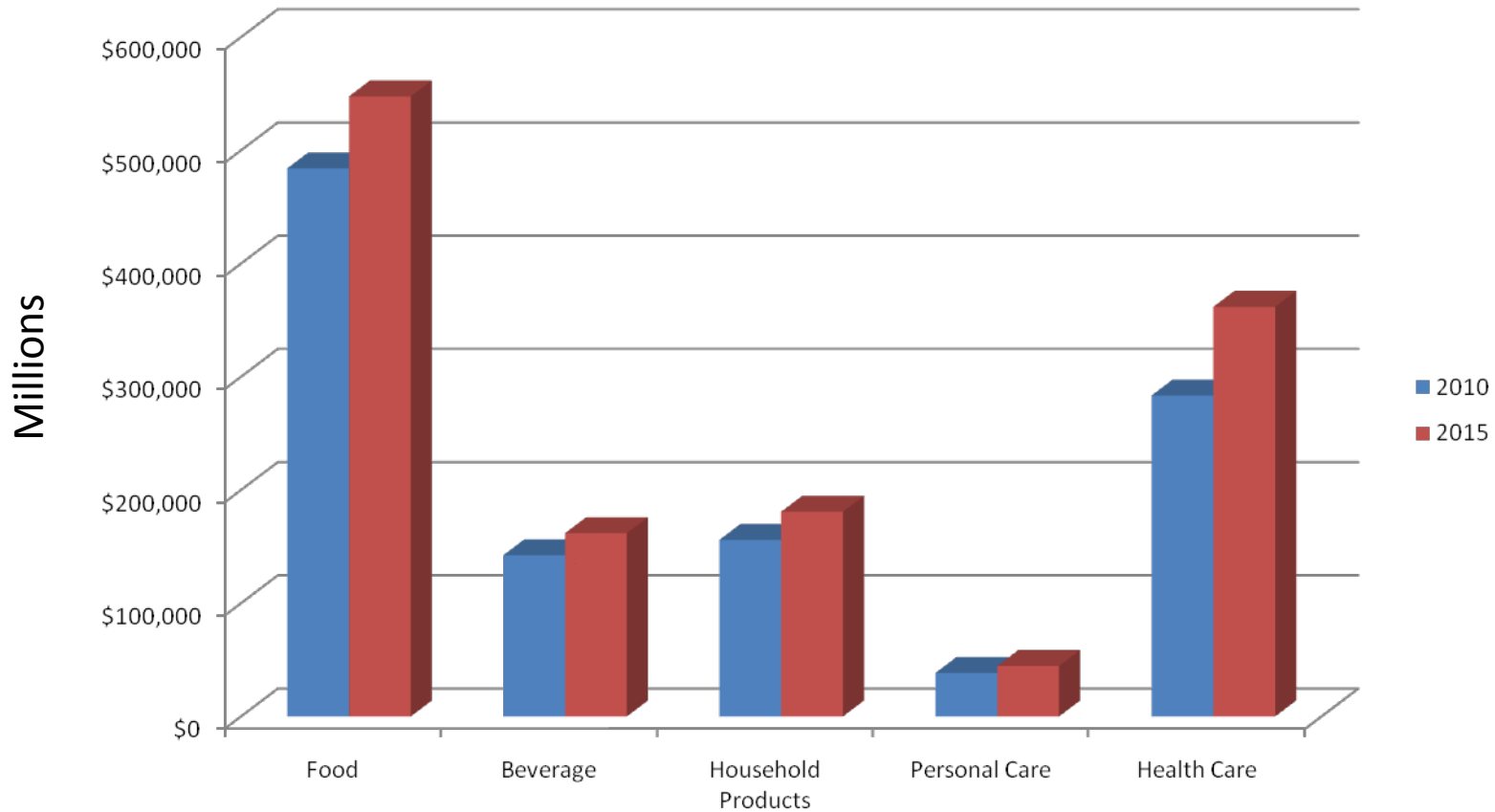
Cost Structure

Cost of Goods Sold	51%
Marketing & Sales	21%
General & Administration	9%
Operational Margin	9%

Industry Reality

- \$200 Billion in Inventory
- Out of Stock rates at 8%-10%
- 80% new product failure rate
- 18-24 month launch cycle
- 5,000 Store closings
- \$200 Billion of promotional investment

Consumer Products Growth



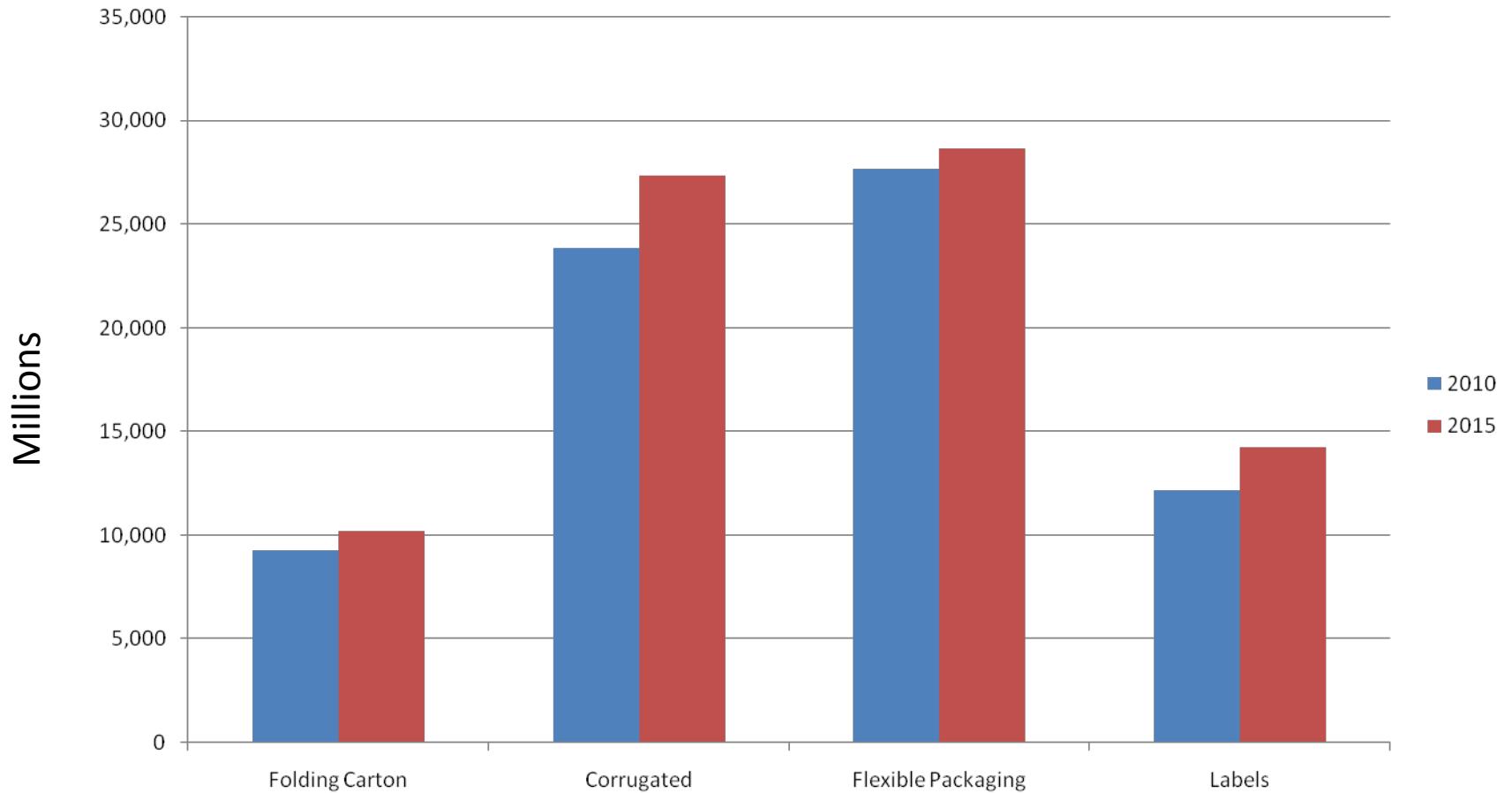
Source: BEA Data Base

Consumer Products Pain

What problems are created?

- Data synchronization – technology now links the supply chain. The technology only works as well as the information put in. A CPG executive stated 10% of his company's products were not getting to the shelf because of product synchronization errors within the supply chain.
- SKU counts – one product manager reported his SKU count has increased 20 fold, from 40 products to 800 due to private labeling requirements.
- Order requirements do not align with production requirements- many times minimum production build on slow moving items require placing three to 6 months of product into inventory.
- Increasing the cost and complexity of logistics – from one CPG executive, *“instead of filling a container with four SKU's, I now fill it with 28”*.

Converter Growth



Source: Karstedt Partners with Industry Bureaus

Converter Growth

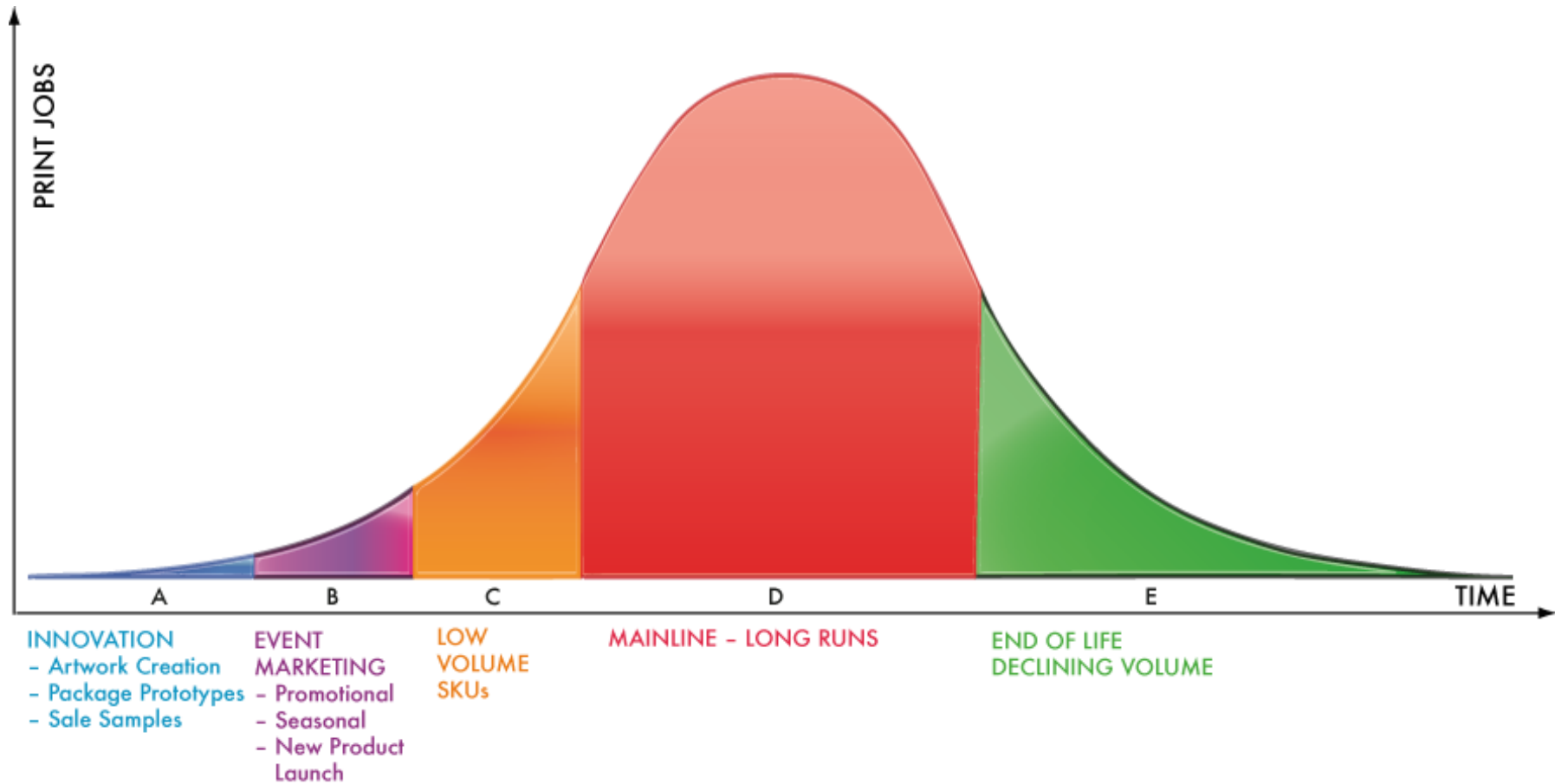
High level of non-conforming orders

- Small order sizes
- Combined SKU orders
- Shorter delivery dates
- High level of graphic changes
- Need for Operational Flexibility
- Need to effectively utilize assets
- Reduced asset utilization

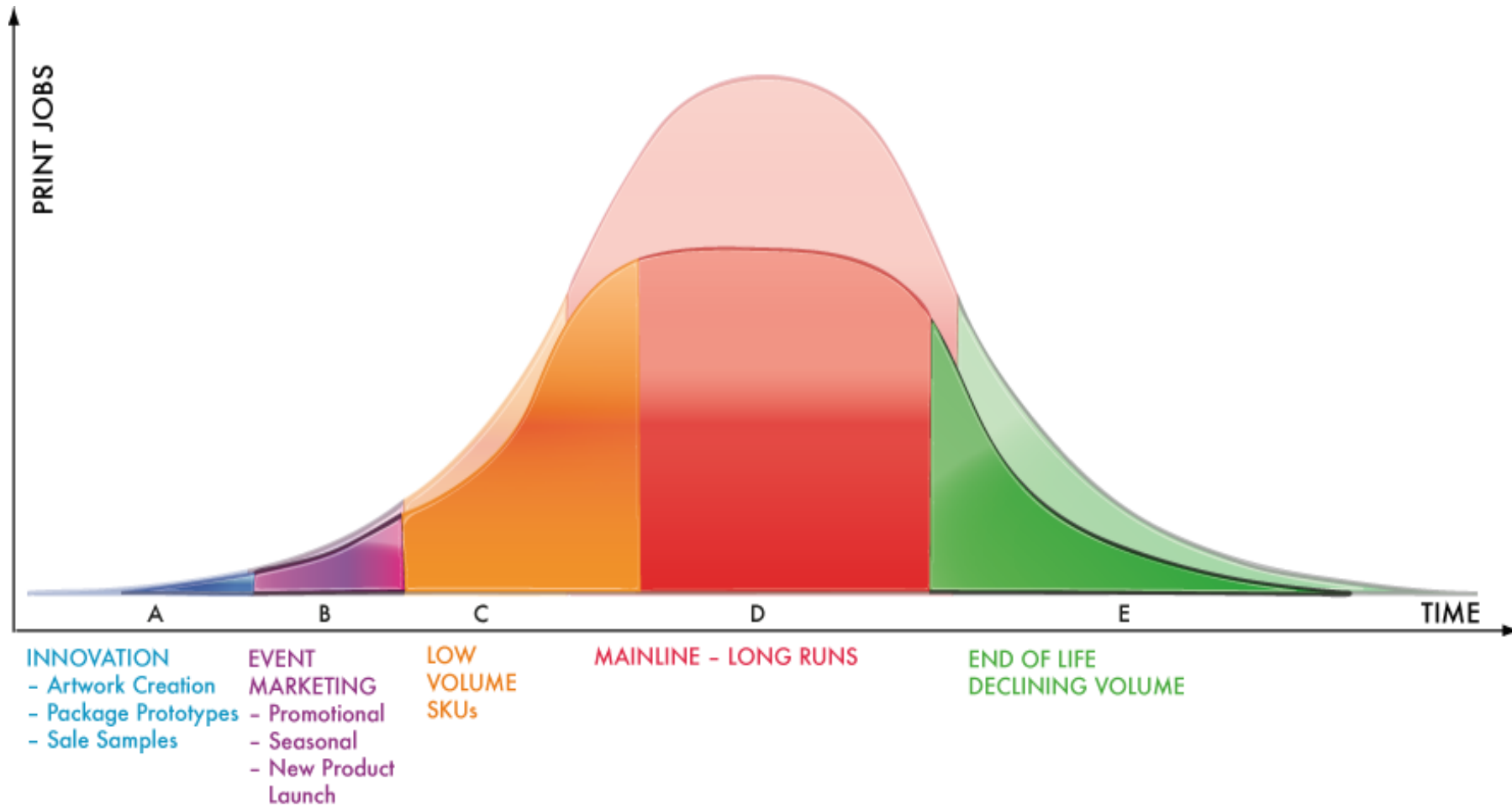


The Source of the Pain

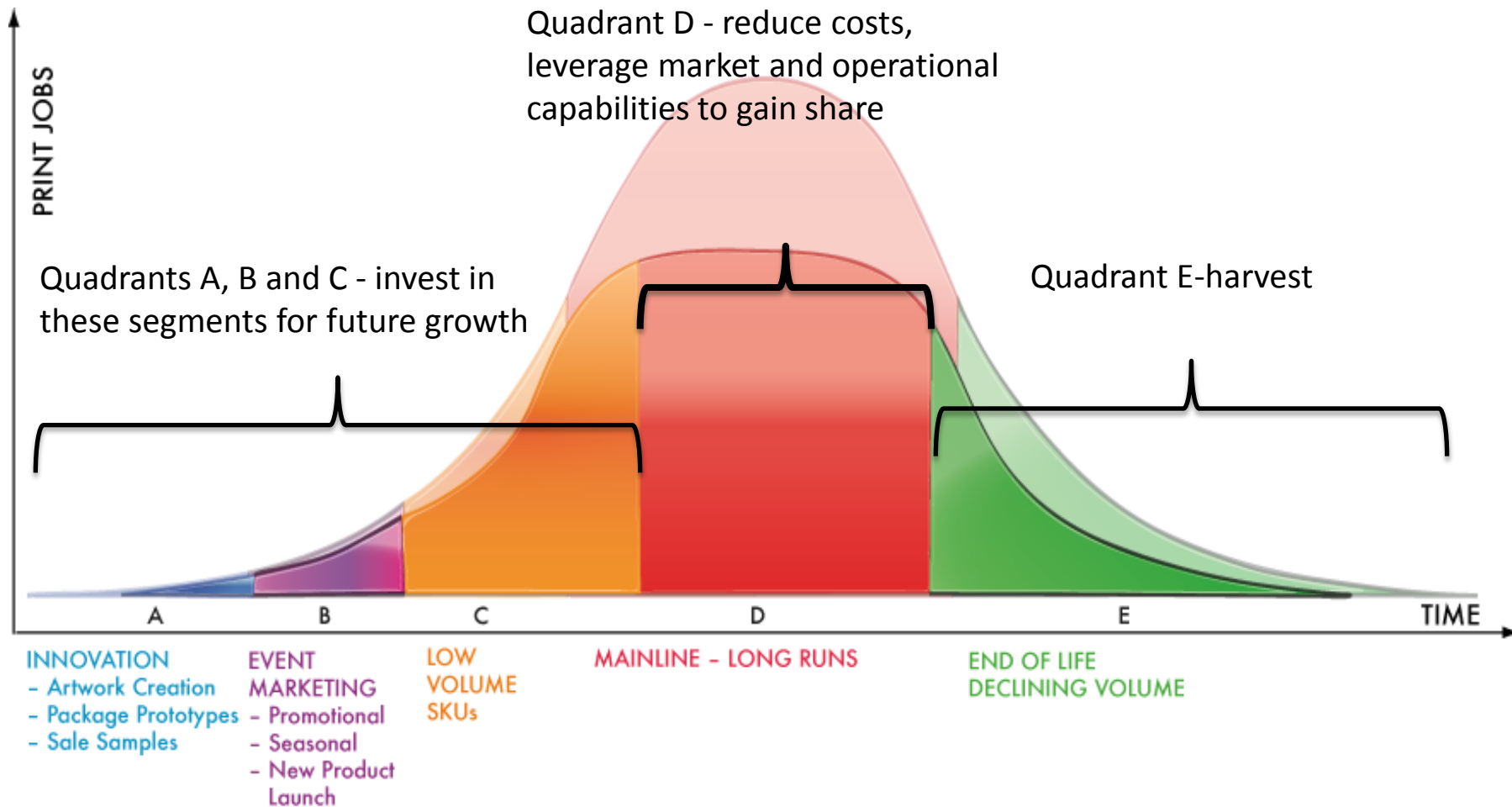
Product Lifecycle



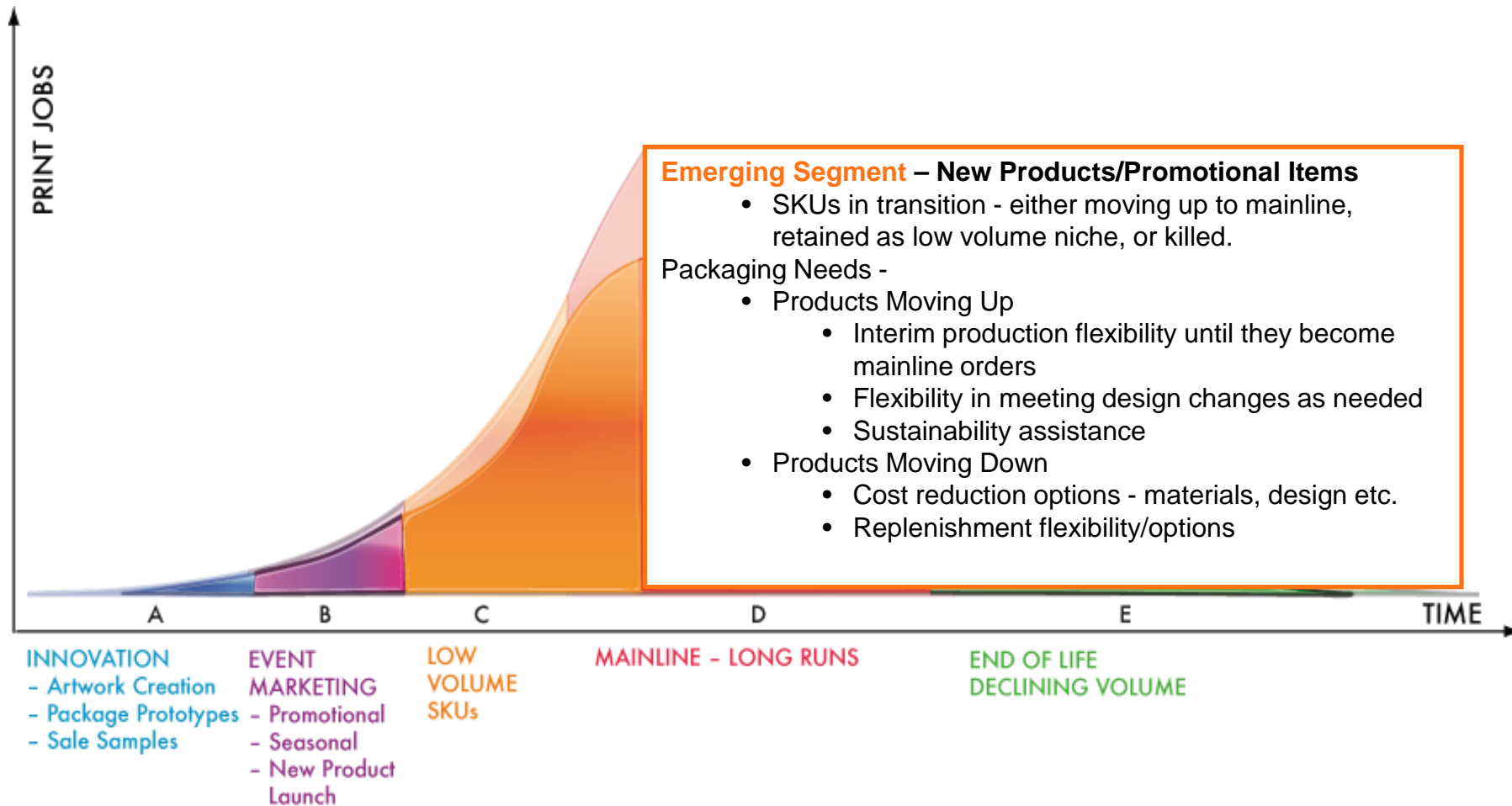
Change in Product Lifecycle



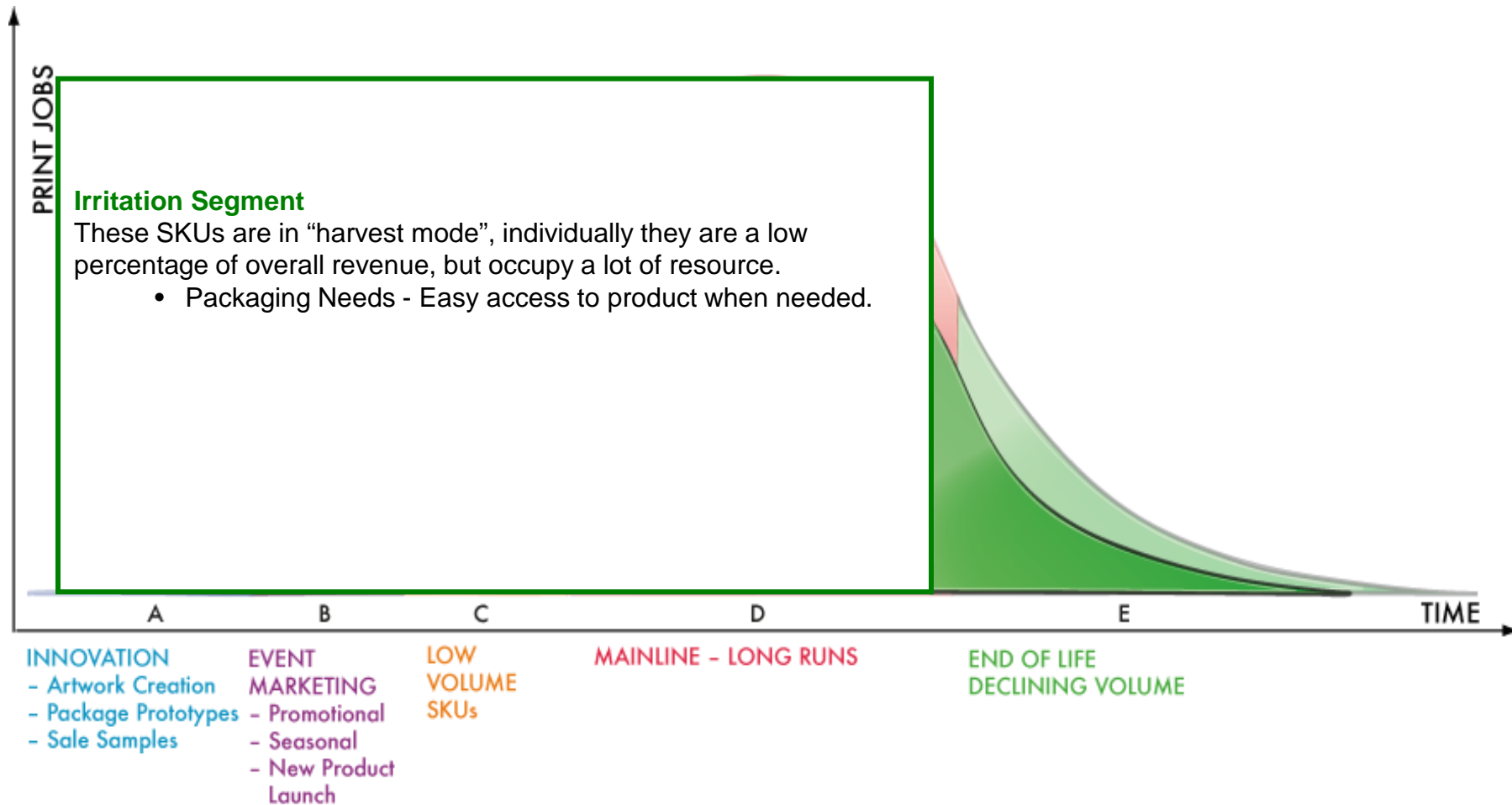
Role of the Quadrants



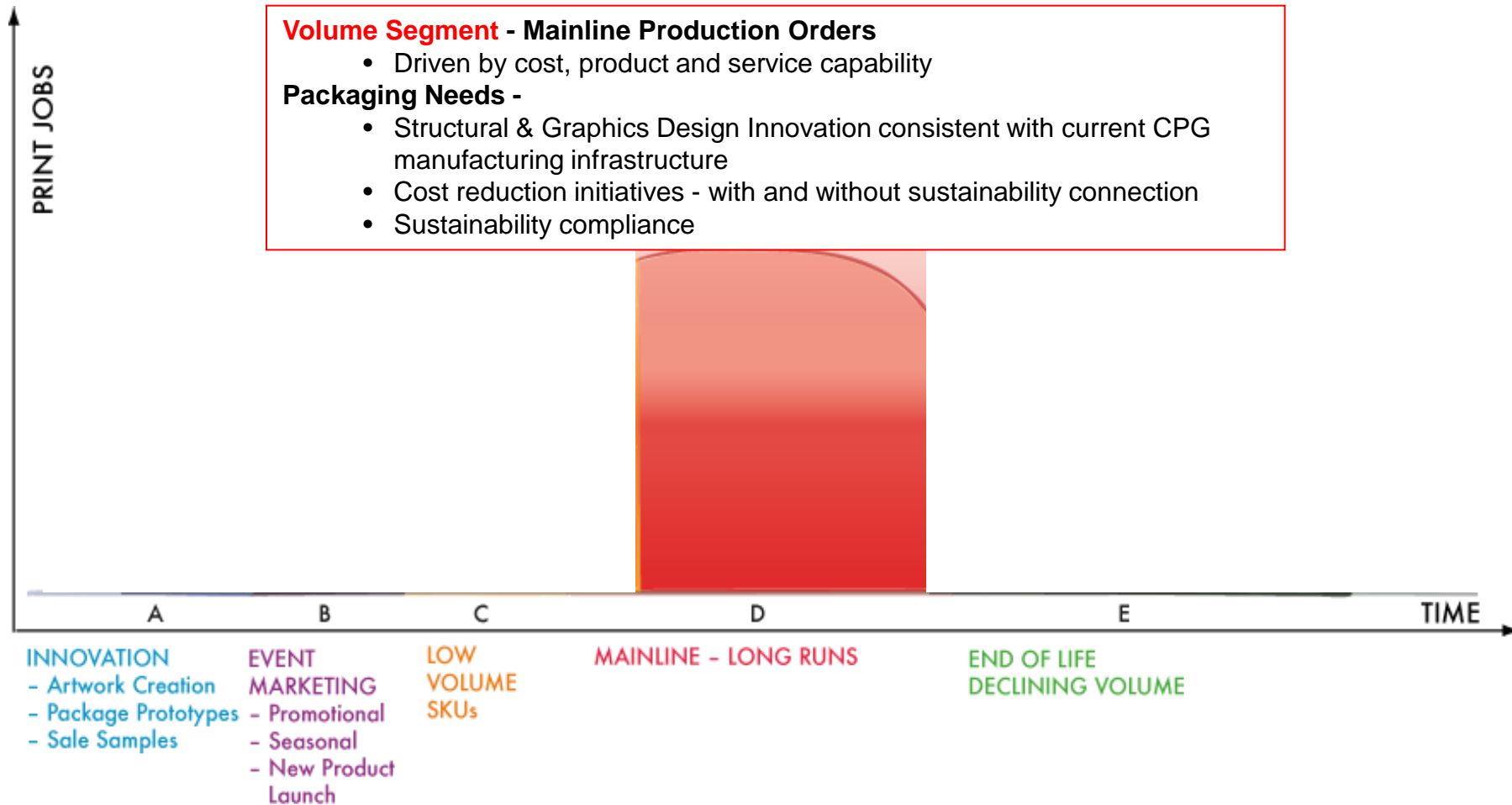
Quadrant Needs



Quadrant Needs



Changing of the Product Lifecycle



The Impact of Private Labels

National Brands are slowing the growth of Private Brands -

- Private Label Sales at Supermarkets and Drug Stores was flat in 2010, with unit share barely growing at .02%, compared to 1.3% the prior year. Aggressive actions on the part of National Brands may be slowing the growth of Private Label

Brand Owner Tactics -

- In 2009, nearly 43 percent of grocery store purchases were sold through promotions, ranging from feature ads or in-store circulars to end caps or sale prices, compared to nearly 41 percent a year earlier, according to The Nielsen Company
- Diversify to add share - a variety of products offering numerous price point to appeal to shoppers
- Niche marketing - targeted products and messages to a discreet segment of shoppers
- Packaging sells - what it looks like is how it will be perceived
- With database technology, brand managers and marketers can personalize brand loyalty and establish firmer relationships with consumers

Contract Packaging

- The **Contract Packaging Association** estimates approximately 1,300 to 1,600 firms are involved in contract packaging in the US. 2010 revenues are estimated to be between \$17.5 billion to \$21.5 billion dollars. The industry is anticipating a five year growth of 11%-16%.
- In a recent survey conducted by the Association CPG respondents were asked to rate their top three reasons for using contract packagers:
 - 68% cited assistance in meeting increasing customer demands
 - 62% cited reduced cost
 - 64% marked increased flexibility
 - 11.3% responded it reduces the number of links in the supply chain
 - 31.5% responded they benefit from new ideas/best practices/expertise
- Respondents were also asked about their requirements over the next 12-18 months:
 - **7%** anticipated requirements **increasing significantly**
 - **17.4%** anticipated requirements **increasing somewhat**
 - **53.7%** anticipated requirements staying **about the same**
 - **12.4%** anticipated requirements **decreasing somewhat**

Source: Contract Packaging Association

Developments

Quadrant “D” Volume Segment - Mainline Production Orders

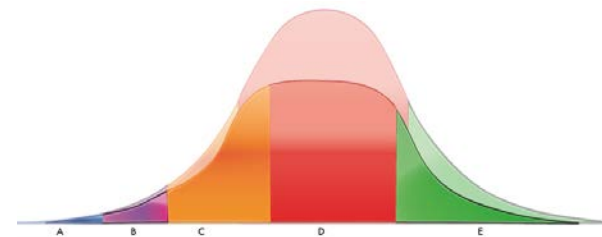
- Driven by cost, product and service capability

Packaging Needs -

- Structural & Graphics Design Innovation consistent with current CPG manufacturing infrastructure
- Cost reduction initiatives - with and without sustainability connection
- Sustainability compliance

The CPG is willing to make investments to improve product acceptance, performance or sustainability. The investment may not translate into higher price for the converter. Areas of interest:

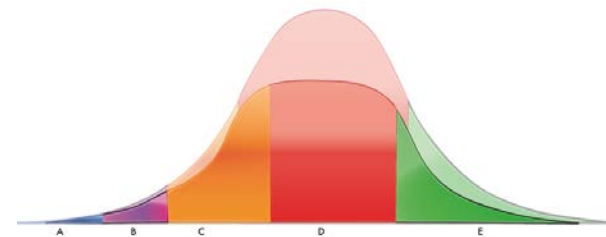
- Intelligent Packaging
- Material science related to better handling, content protection and cost reduction.
- Packaging Innovation related to structural and graphic design.
- Technology and processes to facilitate the integration of the brand message, reduce cost, and/or improve speed to market.



Developments

Projects that may, or are already having an impact:

- Microflute corrugated products
- Bio plastics advancement in adhesives
- Chemical absorbers and emitters.
- Time/temperature indicators: biosensors.
- Development of materials with antimicrobial properties that can be used in direct contact with food.
- Barrier coated board for hot/cold/greasy products.
- 3D imaging, prototyping, rendering and sampling. New technology allowing brands to originate their own prototypes and control costs more efficiently and reduce the involvement of a repro house, studio or bureau.



Developments

Quadrant “A”, “B”, “C” Emerging Segment - Transitional Production Orders

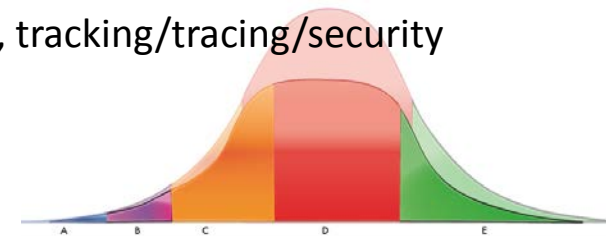
- SKUs in transition - either moving up to mainline, or down to low volume

Packaging Needs -

- Products Moving Up
 - Interim production flexibility until they become mainline orders
 - Flexibility in meeting design changes as needed
 - Sustainability assistance
- Products Moving Down
 - Cost reduction options - materials, design etc.
 - Replenishment flexibility/options

Projects that may, or are already having an impact:

- 3D Modeling, rapid prototyping
- Digital printing
- Contract Manufacturing - desired for innovation, flexibility
- Contract packaging- desired for innovation, flexibility
- Package design, structural and graphics innovation-sustainability, connection to brand campaigns (social media)
- Ease of use - opening (retailer and consumer), stacking, shipping, tracking/tracing/security



Developments

Quadrant “E” Irritation Segment

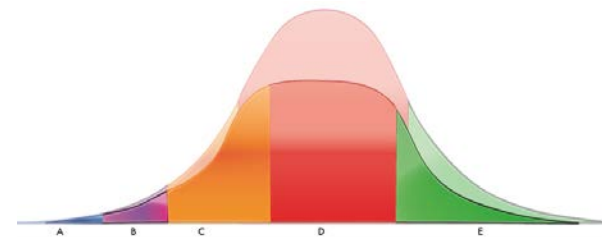
- These SKUs are in “harvest mode”, individually they are a low percentage of overall revenue, but occupy a lot of resource.

Packaging Needs –

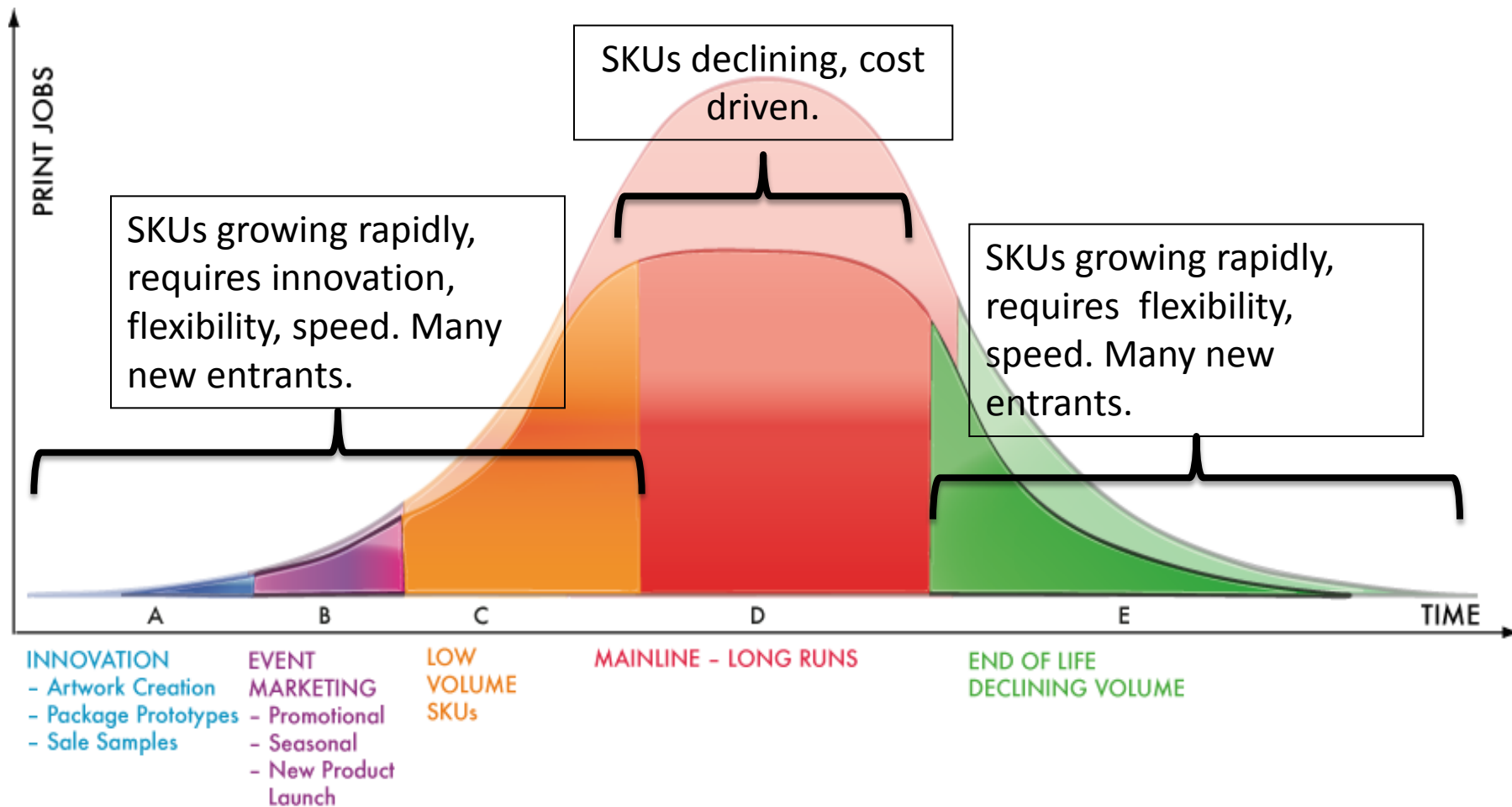
- Easy access to product when needed.

Projects that may, or are already having an impact:

- Packaging substitutions to less expensive materials
- Digital Printing
- Contract Manufacturing - desired for innovation, flexibility
- Contract packaging - desired for innovation, flexibility



Where is Your Focus?



Contract Packaging

- The **Contract Packaging Association** estimates approximately 1,300 to 1,600 firms are involved in contract packaging in the US. 2010 revenues are estimated to be between \$17.5 billion to \$21.5 billion dollars. The industry is anticipating a five year growth rate of 16%.
- In a survey of the Association CPG respondents were asked to rank their top contract packagers:
 - Almost the size of the corrugated market
 - CAGR is 5x the growth of corrugated!
- Respondents were also asked about their requirements for contract packagers:
 - 64.7% responded they were satisfied
 - 11.3% responded they were not satisfied
 - 31.5% responded they were not satisfied
- Respondents were also asked about their requirements for contract packagers:
 - 7% anticipated requirements **increasing significantly**
 - 17.4% anticipated requirements **increasing somewhat**
 - 53.7% anticipated requirements **staying about the same**
 - 12.4% anticipated requirements **decreasing somewhat**

Source: Contract Packaging Association



What Role will Digital Printing Play?

A Disruptive Technology

The Process Today

Print Convert Distribute

Print Convert Distribute

Convert Distribute

Activities Managed by the Converter

The Emerging Process

Postponement
Print

Print

Activities Managed by
Third Parties/Brand
Owners

What Areas will Digital Printing Address?

- Sustainability
- Niche Market Initiatives
- Low to Mid Volume Orders
- Operational Relief

Digital Offerings

	Current Thruput Thresholds	Converter			Third Party/Brand Owner		
		Sampling Proto-typing	Production	Increase Needed	Sampling Proto-typing	Production	Increase Needed
Used for:							
Labels	4,000 sq. ft./hour	Yes	Yes, 10%-15% of market volume		Yes	Yes	
Folding Carton	1,300-2,500 sq. ft./hour	Yes	No	5-8X	Yes	No	2-3X
Flexible Packaging	N/A						
Corrugated	1,300/2,500 Sq. ft./hour	Yes	No	15x	Yes	No	5X

Implications/Opportunities for FPPA Members

- Digital printing is a print process focused on productivity improvement, people and equipment. The perceived product marketing advantages will materialize later.
- The management of the sales provide opportunities:
 - New entrants-new customers
 - Design and file conversion support from analog to digital will be immense
 - The printed product is a minor component of the overall delivered value to the sales, plenty of opportunity to become a solution provider vs. a product provider
- The challenge facing FPPA members: Management of the current customer base, while strategically positioning for growth with a compelling value proposition in the emerging market driven through print postponement.

Need Help?

Call To Action:

Is digital printing part of your strategy?

The industry is in a major transformation, the old metrics no longer fully apply. Some will choose to 'lean forward' and drive new processes that embrace digital printing and some will choose to 'lean back', waiting to see what others do...which way will your company lean?

*Mike Ferrari – Ferrari Innovation Solutions, LLC
(32 year veteran of the Procter & Gamble Co.)*

