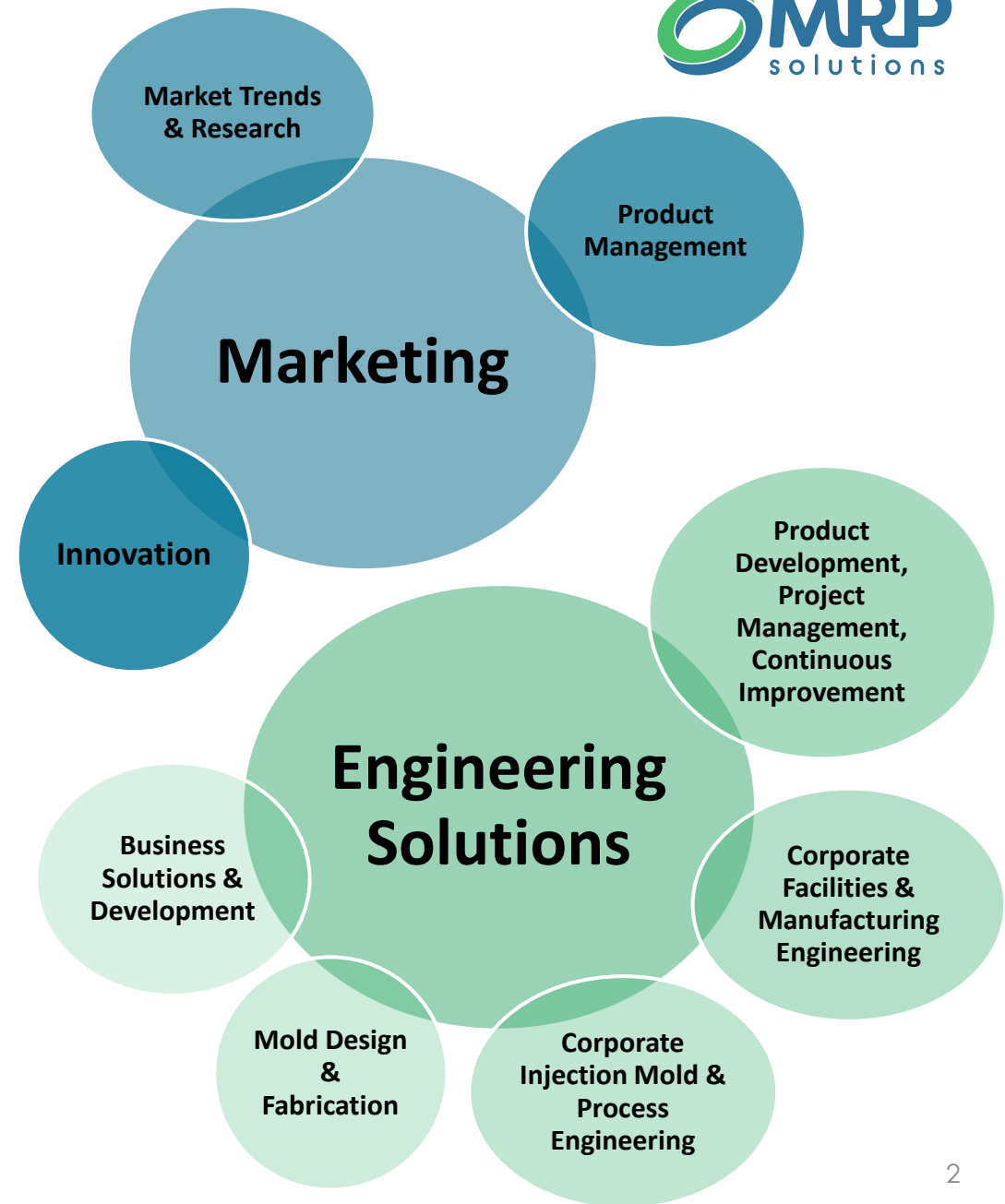


Innovation and New Product Development

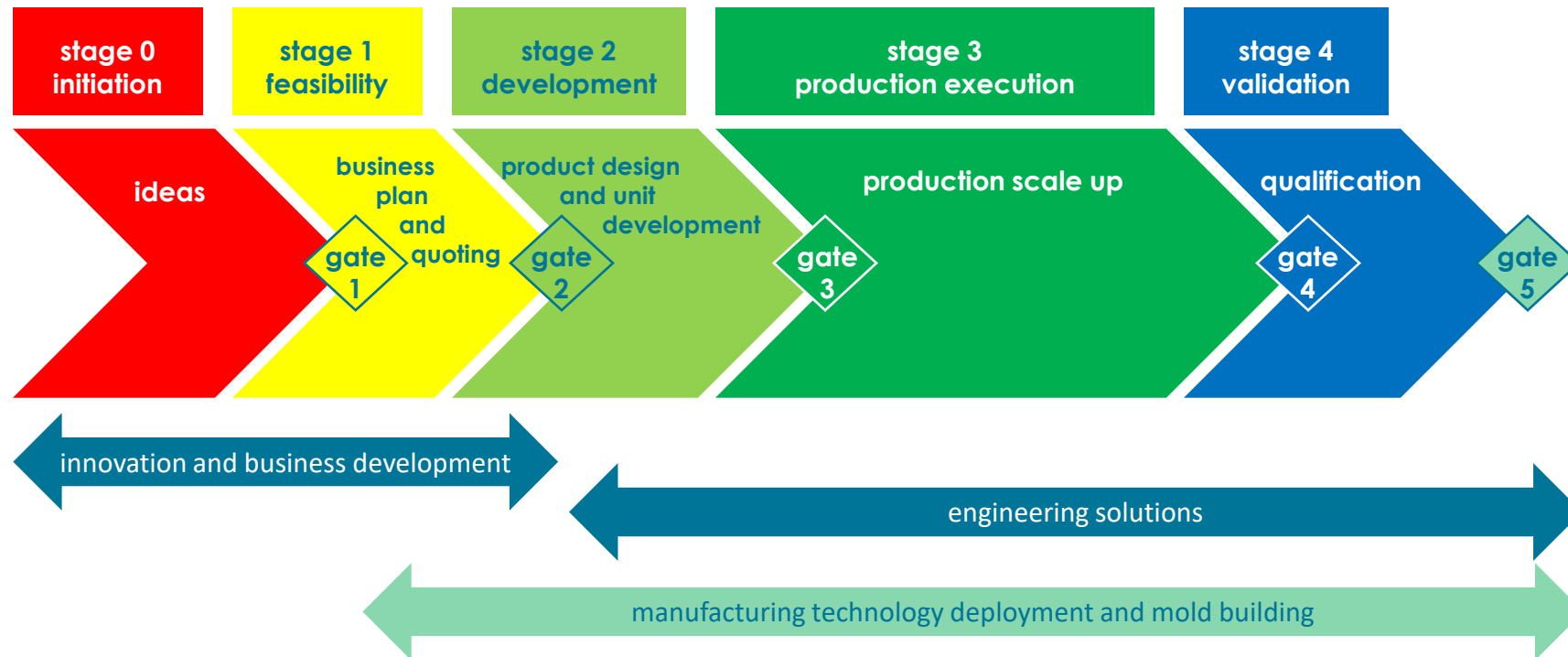
Leo Brozell

Combined Resources

- Cross-company **combined resources**
- Balanced structure supporting **fast execution**
- Extensive **technical knowledge**
- Resourced with **diverse experience**
- New product development driven by a **robust stage-gate process**



Robust Stage-Gate Process



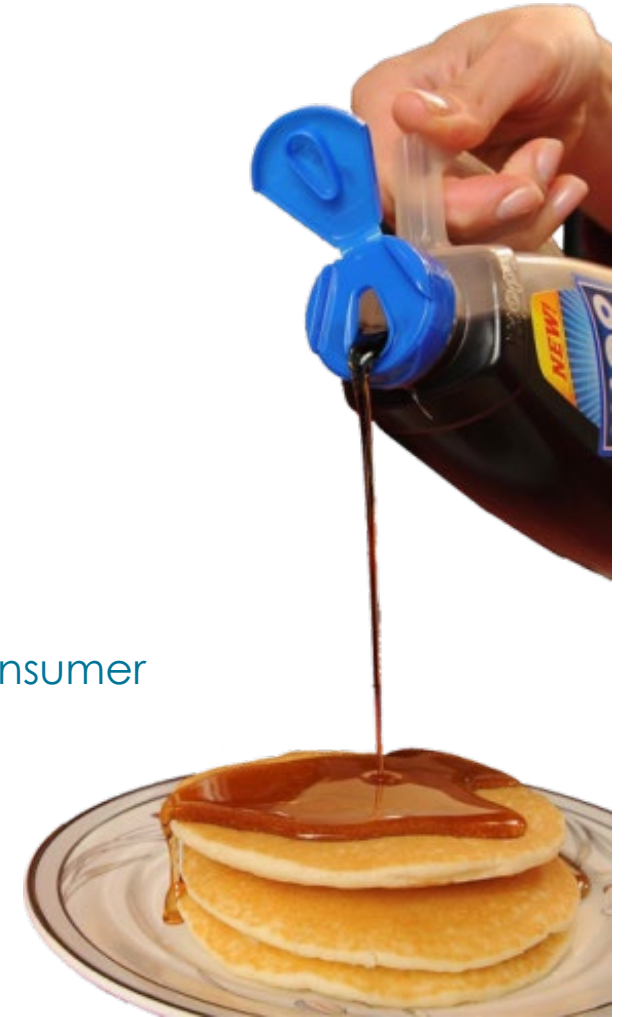
- Common, repeatable development process with common documentation, cross functional meetings and language
- Enables process improvements and reduces errors, improving on time delivery, quality and cost control of projects
- Fulfills ISO 9001:2008 quality standard for Design and Development

Packaging with purpose.

Package Design Considerations

Some Key Considerations

1. Consumer influence on your package design requirements
 - Convenience
 - Sustainability
2. Retailer influence on your package design requirements
 - How will the package be transported and stored
 - Stackability and merchandising
3. Brand influence on your package design requirements
 - Communicating the product's brand messages and claims to the consumer
4. What are the functional requirements needed for your package/product?
5. What is filling process?



Closures: Focus on the User Experience

- Experience at the store or on-line retailer
- Does your package have shelf impact?
 - If consumers focus on a product on the shelf for more than 3 seconds -- they are 63% more likely to buy it
 - If people consumers pick up a product -- they are 96% more likely to buy it
- How does your product work?
 - Squeeze, pour, measure, sift, other consumption or dispensing considerations
- Consider your own experience as a consumer



Closures: Functionality Matters

Consider the following package functionality when thinking of the closure:

- Sealing the content of the package:
 - Liner choice
 - Built-in seal (linerless options)
 - Do you need to provide a seal, tamper evidence?
- Ease of opening
- Ease of access to product
- Re-close, re-seal
- Level of control over product dispensing



Other Things to Consider

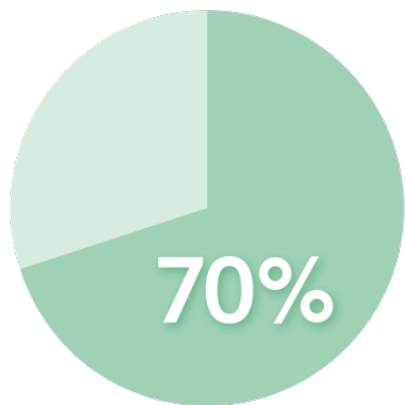
- Industry regulatory implications
- Environmental impact
- Retail shelf dimensional limits
- Filling and capping operations
- Secondary packaging limitations (corrugated package)



Make an Impact with Decorative Closures

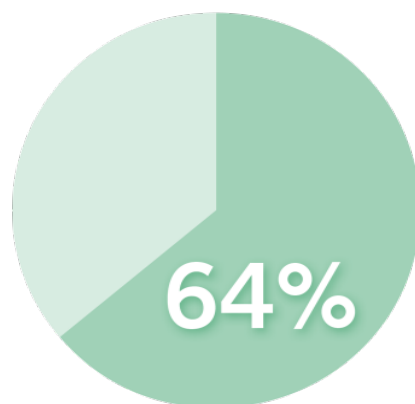
with purpose.

Package Design that Drives Shelf Impact



About **70%** of purchase decisions are made at the shelf.

A product has about 3 seconds to engage the consumer.



Roughly **64%** of consumers will buy a product off the shelf without researching it first.

Packaging that Consumers Love

Packaging drives **36%** of purchasing decisions—more than digital ads, TV ads, or peer feedback.

About **41%** of consumers make a repeat purchase because of a product's packaging.



Custom Light customization options without a full custom mold build

- Liners
- Colors
- Molded-In Decoration
- Decoration Options



28mm Twist Base Closure
Custom Core



NutraGenII



28mm Ultra Light
Hinged Closure

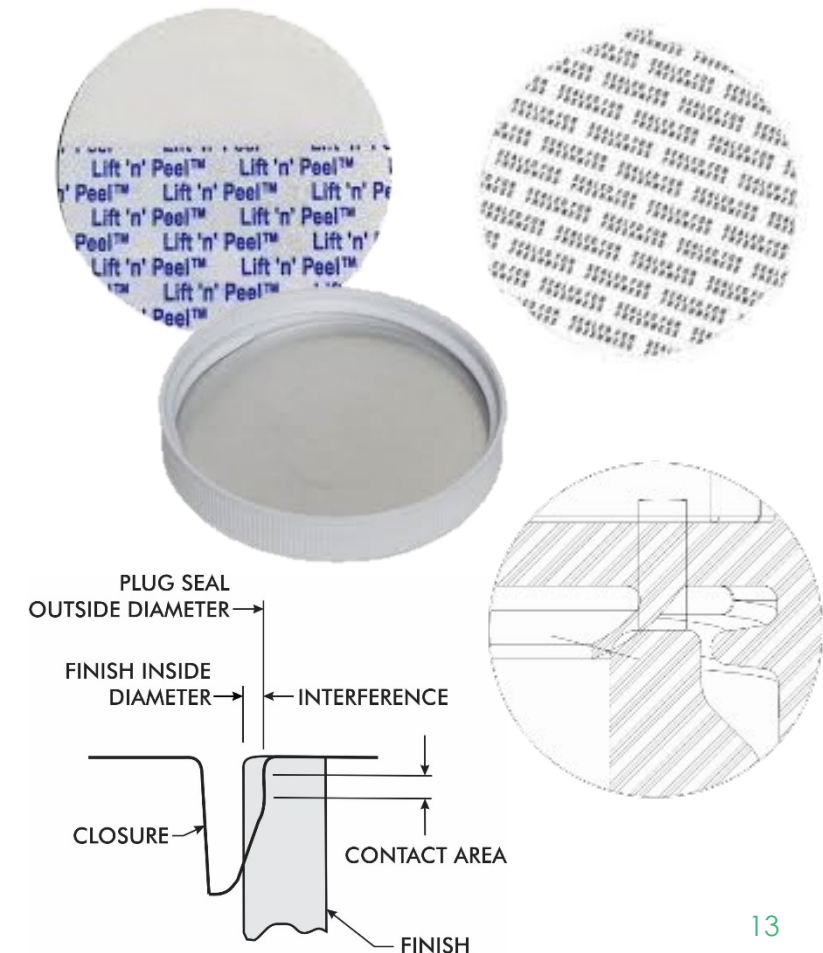
Packaging with purpose.

Customization for Sealing

sealing options

- MRP Solutions has a large inventory of stock liners – enabling customization of stock closures allowing sealing of most any product on most any container - polystyrene, polyethylene, polypropylene, PVC, PET, glass
- Many closures can be customized to create linerless geometry and eliminate the need for a liner
- Linerless geometry can be custom engineered to specific container and product application
- Some linerless geometries can be lined -- allowing for tamper evidence with a secondary seal after initial opening

90% of continuous thread closures we sell are lined



Customization with Sustainable Materials

post consumer recycled resin

- PCR validated across all major product lines
- Have secured a steady supply of PP PCR
- Successfully protocol tested up to 100% PCR in our most popular CRC sizes
- Color matched majority of our stock colors in up to 100% PCR
 - best color match options – blues and greens
 - reds and yellows are challenging
- Now offering PCR resin pricing in addition to virgin resin pricing on ALL quotes where applicable



Customization with Color

use color to set your package apart

- color catches your eye
- consumers often don't know why they prefer something
- most decision making happens at the subconscious level - consumers often make buying decisions when they are not paying attention
- packaging influences consumers in a ratio of 1:3 or 2:3 compared to personal preferences - even if consumers' tastes have a larger influence, a product's visual attractiveness plays a significant part in purchasing*
- drawing attention to packaging increases product sales
- use color to build and identify a brand
- make it easy for consumers to understand product on crowded shelves
- call attention to new formulations or benefits

Packaging with purpose.

* 1/8/2014 – University of Miami and California Institute of Technology



if a consumer can't find your product, they won't purchase it!



which package is more noticeable?



'old' package



the appeal of "new" is hard wired into our brains - researchers have found making novel choices activates the brain's reward center



distinguish flavor or variety within a brand

* July 2008 – Neuromarketing – Roger Dooley

Customization with Molded-In Decoration

custom mold surfaces

Custom cavities in MRP Solutions stock tooling

- Change entire outer surface of closure
- Unique grips
- Unique textures
- Unique shape



Packaging with purpose.

Customization with Molded-In Decoration

custom cavity inserts for a premium look

Custom cavity inserts in MRP Solutions stock tooling

- Allow for customization on top surface of closure
- Surface finish
- Emboss (raised above the top surface)
- Deboss (below the top surface)



Custom Light: Case Study

custom mold surfaces



“For USANA, we built a completely new cavity plate, but we were able to use existing cores and manifold systems, which helped expedite the process and meet the timelines they were looking for to get them to market faster.”

PACKAGING
WORLD

Case Study published Sept. 2013

Custom Light Success Story: SmartyPants



- One of the fastest growing vitamin manufacturers in the world set a goal to utilize recycled material in their product line
- In 2019, Smarty Pants chose MRP Solutions to develop a custom light child resistant closure with molded-in logo because of our ability to incorporate PCR
- MRP Solutions successfully matched over 20 jewel tone colors to SmartyPants' satisfaction and produced parts utilizing up to 100% PCR
- Successfully protocol tested 100% PCR in both the inner and outer components
- SmartyPants' volume continues to increase and were recently awarded shelf space at Costco due to their eco-friendly packaging
- Recently acquired by Unilever due to their growth and sustainability initiatives



Customization with Decoration

tipping

- Transfers a colored foil to an embossed molded-in logo/image via a flat, hot rubber die (consumable)
- High-quality, premium look
- Lighter tipping colors remain opaque even over parts molded in darker colors



Customization with Decoration hot stamping



- A colored foil is transferred to part surface with an embossed, hot rubber die. Unlike tipping, the embossment is on the rubber die instead of the part. A logo design is cut into a consumable rubber die, which can stamp any color foil to the molded part.
- Color opacity can be achieved on a dark colored part even with a light-colored logo.
- Can be done on a curved or domed surface.

Customization with Decoration offset printing

- Uses two rollers to transfer ink/image to flat closures and jars. Ink is transferred from a flat roller to an embossed image on a second roller, which transfers the image to the part. Multiple colored images can be printed using multiple rollers.
- Relatively high production rates can be achieved, offering the lowest conversion cost.
- Because the cost of ink is relatively low, this option offers the lowest raw material cost.
- MRP Solutions offers up to four color offset printing.



Fully Custom Packaging specialized solutions for food

locking microwave
overcap



Packaging with purpose.



snack dispensing closure



Fully Custom Packaging

custom solutions for personal care



*inverted jar
and closure*



*labels applied to
stock packaging*

Packaging with purpose.

Fully Custom Packaging

award winning custom solutions

Best of Show

National Association of
Container Distributors
2014 Annual Packaging Awards
Competition

*tamper evident pour through
pull-ring fitment
and plug seal overcap*



Custom Packaging

- MRP Solutions -- first US producer of two piece square closure for OLLY
- Created part design with necessary features to allow assembly and automation processes to efficiently manufacture, decorate and cap package
- Worked with customer to improve production for increased demand





Keys to Successful Customization Partnership

- Early Collaboration – design reviews, clear boundaries, creativity
- Review of available assets for potential custom-lite application
- Responsive, agile, cooperative innovation
- Support of IP while trusting capabilities and partnership
- True partnership to collectively grow and develop solutions our customers need

AN EXCLUSIVE OFFER for MRP Solutions Center Grand Opening Attendees

Good through 12/31/2023

In celebration of this special event, all attendees are eligible to receive a **commemorative MRP Design Token**, valid for:



- One collaboration session in the MRP Solutions Center
- A \$5000 credit, which can be used toward your design development and time

Let's design your next great package!

Leo Brozell | Vice President of Product Innovation

SCAN HERE TO QUALIFY



Thank You



Chicago

Corporate

100 N Field Drive, Suite 100
Lake Forest, IL 60045

Plattsburgh

Manufacturing

1 Plant Street
Plattsburgh, NY 12901

Twinsburg

Manufacturing

2222 Highland Road
Twinsburg, OH 44087

Somerset

Manufacturing

17 Veronica Avenue
Somerset, NJ 08873