



FROM CONCEPT TO POUCH

A ROADMAP TO SUCCESSFUL STANDUP
POUCH COMMERCIALIZATION
IN FOOD AND BEVERAGE MARKETS

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THE CHANGING CONSUMER LANDSCAPE REQUIRES A MORE THOUGHTFUL APPROACH TO PACKAGE DESIGN

Is your packaging development process the same today as it was a few years ago? Probably not. Technology and manufacturing processes continually evolve. The shift in buying habits among consumers has placed unique demands on packaging. And, the stakes are much higher both in terms of financial investment and brand equity.

To accommodate these changing dynamics, food and beverage marketers are increasingly turning to standup pouches.

This eBook presents a roadmap for the key steps that consumer packaged goods (CPG) professionals should consider when changing their current packaging to standup pouches. These aren't necessarily the only steps and areas involved, but they make up a solid framework for consideration of a product launch in the pouch format. What's more, they offer critical conversation topics when engaging potential packaging partners.

STEP ONE

WHAT IS YOUR PRODUCT?

KEY QUESTIONS TO CONSIDER:

- What is your product category or formulation?
- What barrier requirements (oxygen, moisture and/or light) will you need for your product?
- How will your customers prepare and use your product?
- What is your desired shelf life and in what environment?
- Will your product be a single unit or multi-pack?

Success at the shelf using a standup pouch doesn't start with the pouch itself. It starts with your product.

A thorough understanding of your product category or formulation is crucial so that the proper film structure can be identified and selected. For example, a high-acid liquid in the wrong pouch could result in rapid oxidation and flavor degradation. Likewise, if pouch headspace is incorrectly calculated, major manufacturing problems could occur as the product expands during hot fill packaging.

There are common core film structures that will provide the necessary performance for your product based on the composition and the processing you will use. But, depending on other factors, there could be many ways to customize the film to your application.



PRODUCT FORMULATION

Is your product low-acid or high-acid? Is it high in oils or alcohol?



BARRIER REQUIREMENTS

Is a barrier to moisture, oxygen or light required to maintain freshness, taste and color profiles, and achieve the proper shelf life? Do you know the transmission rates you need to achieve?



PREPARATION AND USE

How will consumers prepare the product? Does the pouch need to be microwaveable? Does it need to withstand boiling?



SHELF LIFE

What shelf life do you want to achieve? How might this be impacted by your distribution process?



SINGLE UNIT VS. MULTI-PACK

Will your product be sold as a single unit on the shelf, or will it be part of a multi-pack? If a multi-pack, what secondary packaging are you considering? How will the package be displayed and stored both in the store and in the refrigerator or pantry?

STEP TWO

IS THIS A NEW PRODUCT OR A PRODUCT LINE EXTENSION?

KEY QUESTIONS TO CONSIDER:

- Is the product currently packaged in a pouch?
- Is the pouch format augmenting a current package for the product (same product offered in a new pouch packaging format with current product/package still available)?
- Is the pouch format completely replacing a current package format?

STEP TWO: IS THIS A NEW PRODUCT OR A PRODUCT LINE EXTENSION?

Already in a Pouch?

If you are extending a product line that's already using a standup pouch, chances are that the majority of your time will be spent on product and branding elements (formulation, quality, art and graphics, for example) rather than on many of the manufacturing factors we've already discussed.

However, if you are currently using a packaging format other than a pouch, you'll need to consider a few things.

Augmenting a Current Package Format

Many successful standup pouch introductions have taken the approach of augmenting a current packaging option to a standup pouch. In this scenario, new SKUs and alternative packaging formats might offer new flavor profiles, sizes, functionalities or other benefits for a specific target audience rather than just offering the current product in a different packaging format.

Replacing a Current Package Format

If you are considering a complete conversion of a current packaging format, you'll not only have to think about the cost and space/manufacturing footprint of the new manufacturing capabilities required but also the disposition of your existing packaging lines.



STEP THREE

HOW WILL YOUR PRODUCT BE PROCESSED AND STORED?

KEY QUESTIONS TO CONSIDER:

- What manufacturing process will your product undergo (hot fill, retort, aseptic, etc.)?
- What are your product storage requirements post-processing?



Long before your product reaches the consumer, it will be subjected to manufacturing processes, distribution channels, handling and placement into the retail environment. If sold through e-commerce, it will undergo even more handling touchpoints. Understanding specifics around each step are critical and will affect the design of the pouch.

Product Processing

Knowing whether your product will undergo a hot fill, retort, high-pressure processing (HPP) or aseptic manufacturing process will help guide the selection of the correct film structure.

Understanding the specific factors within the processing environment (temperature, humidity or post-production processes the pouch will be exposed to) is critical to ensure the pouch will provide desired performance through processing and its entire lifecycle. Consider if your product will be exposed to:

- High temperatures? How high and for how long?
- High pressures?
- Peroxide, steam or irradiation to sterilize the material?

Preservation and Handling Through the Supply Chain

Will the product be stored in ambient conditions? Will the product be frozen or refrigerated post-processing? Will the product be exposed to any extreme temperatures throughout the supply chain and, if so, for what period of time?



STEP FOUR

WHAT IS YOUR POUCH DESIGN?

KEY QUESTIONS TO CONSIDER:

- What is your package size and weight of the contents?
- What is the shape of your package?
- What print method do you require?
- Will your product require a fitment or straw?
- How will your product need to physically present in the retail environment?
- Do you have legal freedom to use your pouch design?

At the heart of every successful package design—especially standup pouches — is a compelling idea that resonates with its audience to influence initial purchase at shelf. It’s a connection between the brand and the consumer that’s as important as the product itself.

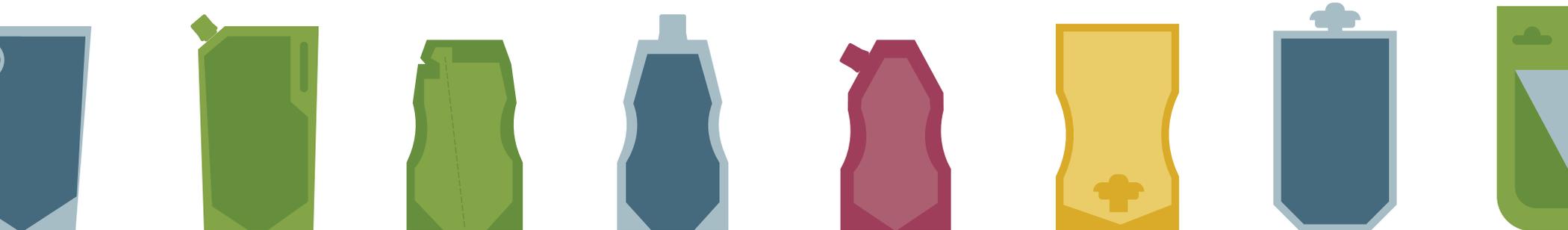
So where do you begin? Consider a design checklist of size, shape, retail presentation, legal considerations, printing and fitments. Let’s take a look at each:

✓ **Size**

The first design parameter is package size. Product volume dictates package size. How much product will go into the package in terms of weight? The overall product weight will dictate key aspects of the package design, including how stiff the film must be to securely contain the contents and how wide the pouch’s footprint must be to keep it upright.

✓ **Shape**

While an eye-catching or ergonomic package may at first seem like the most important consideration for a pouch, it’s important to first optimize the package shape for the manufacturing process. Every pouch manufacturing process has limitations and specifications that are directly related to the characteristics of the package (or pouch) being processed with consideration to speed and accuracy of fill. Also, keep in mind that an unusual contoured package shape can result in higher material costs simply because more film must be scrapped to achieve the desired result.



STEP FOUR : WHAT IS YOUR POUCH DESIGN?

✓ Retail Presentation

Perhaps the most important aspect of a standup pouch is literally its ability to stand up—both on the retail shelf and the consumer’s pantry, kitchen counter or dining table.

If the product does not have secondary packaging, the ability to stand up on store shelves is even more critical. When presented as a single unit, standup pouches require the proper stiffness and shape to claim space in the store and capture shopper attention. In addition to the film structure, gusset width is another key parameter that can contribute to performance.

Package shape is also driven by how the product will be retailed. Again, this determination should be made early in the design process as a wide variety of retail methods may be applicable (see sidebar).

✓ Legal Considerations

Shapes, design, functionality and other features are sometimes covered under patent and trademark law in the U.S. and across the world. When you have selected your shape and design, it is important to make sure you have the freedom to legally introduce your chosen package design.

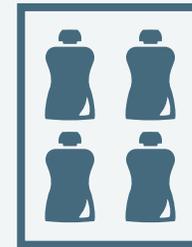
ON THE SHELF

Knowing how your product will be retailed is vital to its design. Consider how each of these retail applications would affect the size, shape and overall appearance of your standup pouch.

Single Unit



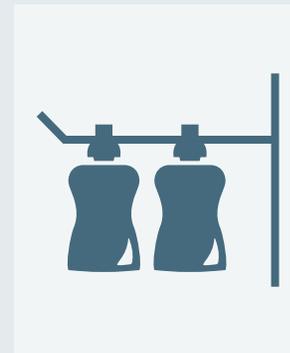
Multi-Pack



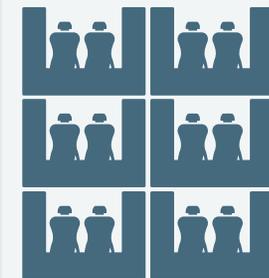
Retail-Ready



Pegs



Bulk/Club Store



✓ **Printing**

Printed features play a key role in branding the product and in its shelf appeal. Engaging the shopper in an environment cluttered with other choices means delivering brand differentiation in a variety of ways. Options include:

- **Print techniques** (gloss versus matte)
- **Tactile effects** (delivers a dimensional look and feel on package)
- **Visual effects** (holographic or reflective details to create visual intrigue)
- **Clear window in certain areas** (to allow product texture, freshness and color to be visible through the pouch)

Before you consider print enhancements, it's important to specify your printing method. Are you employing flexography, rotogravure or digital? Which critical elements of the design are guiding you to the chosen method? Preparation for how the design is printed needs to happen at the beginning to avoid costly delays and issues later on.

✓ **Fitments**

A prime consideration for any standup pouch is whether it will include a fitment or not. If not, will the product require a straw or other external dosing tool? And will these tools need to be attached to the product or provided with the product in some other way?

Fitment specifications are driven by your target audience. Products for small children, for example, must incorporate fitments that are choke resistant. Teenagers and adults may prefer fitments that enhance their product experience, such as reclosability or ease of dispense like a ribbon of jam, sauce or sour cream; while elderly consumers may require fitments that are easy to manipulate and require little strength to open.

Fitment insertions require machinery and manufacturing techniques that few companies should attempt to set up without the aid of the machinery manufacturer.

FITMENT FUNCTIONS AND FEATURES

Fitments for standup pouches serve a wide array of important functions and features, some stemming from consumer trends. Available features include:

- Easy open
- One-handed, mess free dispensing
- Resealability for multi-use
- Self feeding (baby food)
- Controlled dispensing to match product viscosity and desired flow
- Child safety and choke-resistance
- Audible snap open for freshness cue
- Tamper-evidence (food safety)



STEP FIVE

WHAT SHOPPING CHANNELS WILL YOU SELL YOUR PRODUCT IN?

KEY QUESTIONS TO CONSIDER:

- What percentage of your product will be sold in each retail channel option?
- What is the possibility of multiple versions of the same product adapted to the requirements of each channel?

As the popularity of various retail channels shifts and changes to accommodate the shopping habits of today's consumers, packaging professionals must tailor their package design to each one — sometimes with multiple versions of the same product.

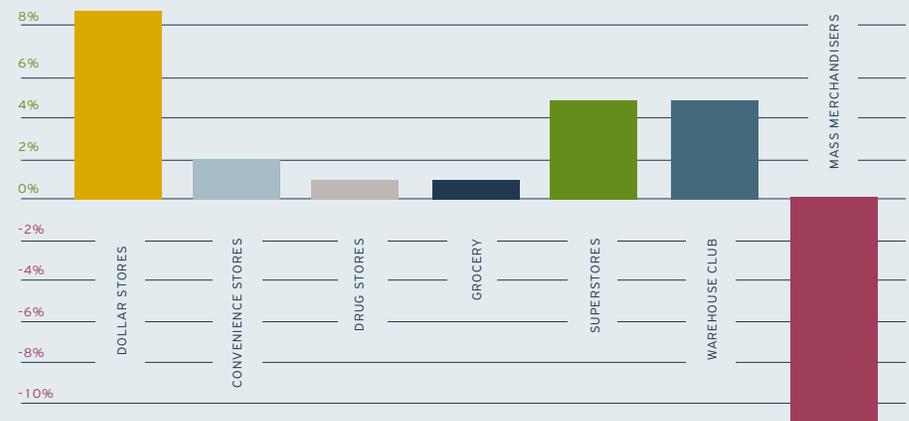
Predicting shifting trends in sales by channel and investing in packaging that is optimized for channels other than the traditional grocery store are top of mind for major CPG companies worldwide.

Smaller food companies, too, should collaborate with their packaging partner to ensure standup pouch formats sync with their respective targeted retail environments and, when appropriate, e-commerce.

The next two pages offer guidance for how packaging may need to be tailored to the requirements of each channel.

U.S. STORE COUNT EXPANSION BY CHANNEL

Convenience added the most stores, but dollar stores are growing more rapidly in terms of growth rate



Source: Nielsen TDLinx; December 2013-December 2015

STEP FIVE : WHAT SHOPPING CHANNELS WILL YOU SELL YOUR PRODUCT IN?



CONVENIENCE STORE

On-the-go consumption — One-handed handling to make the product easy to carry, open and consume, especially in the car.

Ready to consume — Requires minimal or no preparation.

Clear window — Allows shoppers to see the product freshness for themselves.

Strong brand identification — Cuts through the cluttered environment of these smaller stores.

Size and shape — Easily displayed on pegs or on smaller shelves.

Stocking and reordering — Case counts make it easy for c-store employees to order/stock (for example, if it takes six packages to fill a peg, you'd create cases with six units per case). This can also help you meet price pack architecture (PPA) and margin requirements.



VALUE/DOLLAR STORE

Smaller package sizes — Optimized product volume designed to hit a specific lower price point, which also consumes less shelf space when compared to other channels.

Fewer package counts — Accommodates both smaller backroom spaces and fewer staff who must handle the product, as well as a different supply chain structure where products are not being delivered on pallets.

Visual impact — Shelves are shorter and aisles are more narrow making it crucial to create visual disruption to stand out.

Communicate value — Consumers in this channel want to feel like they are getting a good value for their dollar; being able to communicate that on package is vital.

STEP FIVE : WHAT SHOPPING CHANNELS WILL YOU SELL YOUR PRODUCT IN?



CLUB STORE

Six-sided billboards —Ensures your brand will always be visible, from any side, when displayed on the pallets or bulk boxes favored by club stores.

Secondary packaging —Meets store requirements for high-volume/single purchase preference of club store shoppers.

Price driven —Promotes purchase at the lowest possible price point so consumers gain the impression they are getting the best value possible.

Pantry friendly —Optimized for simple at-home stacking/shelving once product is removed from secondary packaging or bulk boxes.

Unique value —Club stores want to avoid direct price comparisons so they require differentiating SKUs in order to provide this value to their shoppers.

Package colors —Lighting is usually dull in club stores; make sure colors on package react well in a dull environment.



E-COMMERCE

Rigorous supply chain —The direct to consumer supply chain is much different than when products are shipped safely on pallets to retailers. Package must be strong enough to withstand the many touch points as a single product along this supply chain to avoid product arriving damaged at consumers' doorsteps.

Shipping economics —Package format matches e-commerce distribution costs to product's value.

Repackaging requirements —Fits well when co-mingled with other goods and accommodates additional protective packaging to ensure whole box arrives undamaged.

Optimize for consumer — Say goodbye to shelf restrictions and hello to brand new opportunities to design your package for consumer convenience.

Shelf life —Able to survive ambient distribution over an extended time period.

STEP SIX

WHAT ARE YOUR SECONDARY PACKAGING REQUIREMENTS?

Just when you've nailed down the size, shape and finish of your standup pouch, it's time to think about secondary packaging. In both retail environments and via e-commerce channels, a thoughtful approach to secondary packaging is critical.



Merchandising

Grouping individual products in secondary retail- or shelf-ready cartons or containers appeals to retailers since it helps them in both stocking and merchandising.



Product Handling

From the filling machine to the consumer, it's important to facilitate safe and efficient handling of the individual products through secondary packaging.



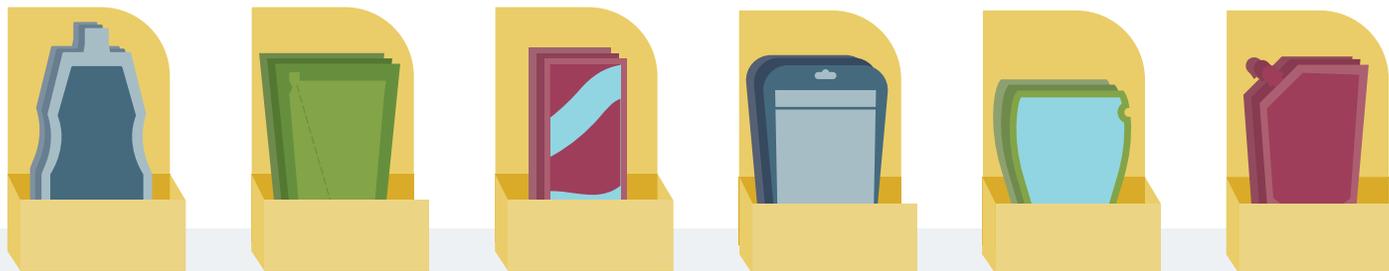
Bulk Sales

Secondary packaging allows larger unit sales of same individual products in club stores or e-commerce.



Shelf Life

Flexible secondary packaging can help extend shelf life for certain product categories.



STEP SEVEN

ARE YOU PRODUCING INTERNALLY OR THROUGH A CO-MANUFACTURER?

KEY QUESTIONS TO CONSIDER:

- Will you be investing in new or upgraded pouching equipment?
- Will you be producing your product internally?
- Will you be producing your product using a co-manufacturer?

Do you have the necessary equipment to deliver standup pouch packaging, are you planning on making capital expenditures to develop the capability, or do you require a manufacturing partner?

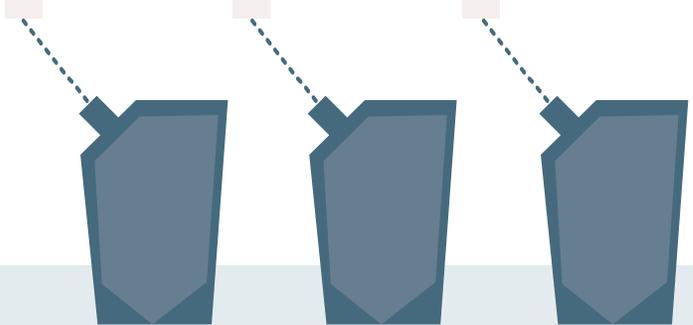
If the risk of investment in manufacturing pouches is an issue, you may consider establishing a partnership with a co-manufacturer, or “coman.” Comans already have the equipment and manufacturing structure in place to help you produce standup pouches quickly and with minimal capital investment. When selecting a coman, it is important to determine their processing and post-processing capabilities that your product may require. Examples might include food processing and sterilization to reach the desired shelf life, as well as storage capabilities like refrigeration or freezing capabilities if the product will not be shelf stable at ambient temperatures.

While you’ll need to identify and learn more about a coman before moving forward, here are some key reasons that working with a coman may offer the most efficient manufacturing path to market your standup pouch.

✔ Technology Access

Working with the right coman can offer cost-effective access to advanced food processing technologies and manufacturing capabilities that may be otherwise cost-prohibitive. This flexibility allows you to specify exactly what type of capability you need based on product type, including:

- Hot fill
- HPP
- Refrigerated
- Retort
- Aseptic



✓ Risk Reduction

Moving to a new packaging platform (even to a widely accepted format like standup pouches) introduces an element of risk. Many CPG companies seek to mitigate this risk by partnering with a coman who offers proven performance.

Quality—If you are not able to deliver the package you envision with your current in-house manufacturing resources, working with a coman who offers state-of-the-art capabilities can help ensure your standup pouch will meet your key quality criteria.

Capital Investment—Ask yourself how much money you're ready and willing to invest in new equipment, employee training, insurance and other related manufacturing overhead. Is it worth your forecasted throughput?

Proof of Concept—Working with a coman allows you to introduce your product and gauge market acceptance before investing in the costly infrastructure needed to sustain production based on future growth of your product.

✓ Timeline

Moving from concept to commercialization on any product introduces its own unique timelines. But when you're attempting to either create a new category in the marketplace or move quickly to gain traction on an emerging trend, the time required to establish and introduce all-new manufacturing capabilities is sometimes compacted significantly. Comans can help you negotiate tight timeframes more efficiently since they already have the equipment and the needed personnel in place.

✓ Operational Considerations

Across your current product portfolio, virtually every manufacturing option has likely been studied and selected for its efficiency and return on investment. But with new packaging concepts, experimentation is part of the process.

The right coman partner will offer more production options to consider and test. From fill on-site to freeze on-site to HPP or hot fill, it's important to verify which operational capabilities deliver the highest possible product quality. Determining the process often requires trial and error on the manufacturing line rather than simply on paper.

Another consideration is whether your current plant offers the capacity you'll need to add standup pouches to your portfolio without disrupting ongoing production of existing product lines. An offsite partner expands your manufacturing capacity virtually overnight.

STEP EIGHT

DO YOU HAVE A PROCEDURE FOR TESTING AND APPROVING THE PRODUCT?

KEY QUESTIONS TO CONSIDER:

- Do you have a documented protocol for testing and approval of the pouch material?
- What tests are included in your protocol?
- Who on your team will participate and provide approvals in the testing process?

Do You Have a Testing Protocol?

After selecting a pouch film structure and ensuring your packaging fits manufacturing, distribution, sale and use requirements, it is helpful to develop a standard protocol.

A well-defined protocol ultimately reduces risk by establishing performance parameters that allow you to judge performance and quantify any problems in the event of a recall or defect.

Protocol Elements

A typical protocol consists of an objective, a description of the process, and roles and responsibilities of everyone who touches the package throughout the manufacturing process. It also defines individuals on the team who will analyze and make pass/reject or fitness for use decisions with consideration to every critical performance parameter.

The protocol also defines quality standards for the product.

These standards are ultimately focused on food or product safety, but they also can incorporate consumer usage criteria too. Quality standards for a large CPG food manufacturer could include:

- **Operational qualification** on machinery during processing, including production speeds
- **Product performance qualification**, including fill rate accuracy
- **Cosmetic/visual qualification**
- **Shelf life testing**
- **Quality assurance testing** of the product once it comes off the line, which could include items like burst and leaker testing

MEET THE PROTOCOL DEVELOPMENT AND APPRAISAL TEAM

Protocols usually identify a validation team that is comprised of multi-disciplinary professionals who oversee, approve and ensure all quality standards are met. Often, the team is tailored to the specific project requirements, but some representation of the following functional areas is typical:



R+D

Business
(marketing,
brand, etc.)

Technical
Services

Coman
(if involved in
the product)

Film
Manufacturer

Operations

Quality

Purchasing/
Procurement

STEP NINE

WHO ARE YOUR PROJECT STAKEHOLDERS?

KEY QUESTIONS TO CONSIDER:

- Do you have a team appointed for the project?
- What business functions are represented on the internal team?
- What key external partners are on or will be on the team?

Communication is critical when taking a new packaging concept from design to production to market. Assembling a goal-oriented, cross-functional team that oversees every aspect of the concept to commercialization process should be a top priority.

KEY INTERNAL MEMBERS

Consider the following roles for the project team. These are internal stakeholders who determine the checks and balances required at each step to make your project successful, and including them in the core project team will contribute to the overall success of your package development. Making sure that senior leadership has approved the cross-functional resources, ensuring they are bought into the project's scope and objectives, and agreeing to the timetable for the project will warrant project success.



Package Engineers

Food Technology

Marketing

Operations

Coman Vendor Liaison
(when using a coman)

Senior Management

Procurement/
Purchasing

EXTERNAL PARTNERS

The project team would typically extend to outside suppliers beyond a company who provide expertise, product and services. These team members may include:



Advertising Agency/
Graphic Designer



Packaging Equipment Suppliers



Film Suppliers



Dispensing/
Dosing Suppliers
(fitments, straws, etc.)



Secondary Packaging Providers

Why Have a Team?

Having all the expertise you can put together in a single room when planning greatly increases your chances for development and commercial success.

Speed – Questions that arise will be answered on a timely basis resulting in quicker decisions and shorter timelines. Eliminate many iterations of emails, meetings, and express package and prototype shipments.

Ideation – Close collaboration will lead to better ideas and problem solving, building off of cross-functional viewpoints, which will build upon each other to strengthen the ultimate solution.

Continuity – Having a full team involved from the onset helps mitigate the potential negative impact if there is any individual turnover within the group. Additionally, if an acquisition or restructuring is on the horizon, the team would help make this transition smoother and more productive.

TAKE THE SELF ASSESSMENT

CAN YOUR PACKAGING SUPPLIER SUPPORT ALL YOUR POUCH PACKAGING NEEDS?

Use this assessment to help you align your needs with the capabilities of potential pouch packaging suppliers.

DOES YOUR PACKAGING SUPPLIER MEET YOUR NEEDS FOR PROGRAM FLEXIBILITY AND REDUCE RISK?

- Has pre-made pouch and rollstock capabilities
- Facilitates manufacturing flexibility — strong relationship with co-manufacturers and experience with in-house production processes and equipment
- Acts as project manager with all partners to provide guidance to reduce risk and cost and ensure speed-to-market and program success

DOES YOUR PACKAGING PARTNER PARTICIPATE IN YOUR PROTOCOL TESTING?

- Helps define package testing protocol and establish performance parameters to reduce risk, assess package and product performance, and exceed your quality expectations
- Sets high standards for quality assurance throughout entire packaging process from film manufacturing and line performance to shelf life and food/product safety
- Offers ISTA-3A e-commerce simulation performance testing for your existing packaging to learn how your package performs in the e-commerce supply chain stand and how you can make improvements

DOES YOUR PACKAGING SUPPLIER PROVIDE THE APPROPRIATE FILM STRUCTURE FOR YOUR PRODUCT NEEDS?

- Delivers film structure that meets the barrier property, food safety and shelf life needs of your product
- Has in-depth understanding of all types of product processing (hot fill, retort, aseptic, HPP, processing environment, etc.)
- Offers technical expertise in pre-made and form/fill/seal machinery and strong relationships with those machinery partners
- Looks at entire supply chain to ensure product preservation throughout

CAN YOUR PACKAGING SUPPLIER HELP YOU ASSESS THE NEEDS AND CHALLENGES OF YOUR PRODUCT IN DIFFERENT RETAIL CHANNELS?

- Understands the difference in supply chains for retail channels (traditional grocery, value/dollar store, club store, convenience store, e-commerce) and the impact on packaging
- Understands shelf depths, aisle sizes, storage capacity for each channel and how that impacts packaging design, size and pack counts
- Recognizes importance of package size to price strategy for each channel
- Delivers primary and secondary research and consumer insights to create successful packaging that drives growth in each channel

Understands e-commerce distribution chain, the risk of package failure in that channel and what types of packaging can reduce that risk

DOES YOUR PACKAGING SUPPLIER OFFER SUPPORT IN THE PACKAGE DESIGN PHASE?

- Offers package design support, including: Ideation Sessions, Package Prototyping, Consumer Research, Shelf Set Testing, Technical Trials and more
- Provides guidance on package shape, design, fitment and printing options based on cost and manufacturing considerations

Has knowledge of how new SKUs vs. product extension SKUs will affect go-to-market strategy

Advises on secondary packaging design options based on post filling process and retail strategy

Helps influence support of your strategy with internal stakeholders

Brings in appropriate external design, machinery and fitment partners early on to reduce risk, support collaboration and improve speed to market

Advises on appropriate material for package decoration and graphic options to enhance presence at retail shelf

BETTER POUCH PACKAGING STARTS WITH COLLABORATION

If you are ready to drive growth in your organization through standup pouch packaging, talk to Bemis. We have the market insights, creative ideas and R&D capabilities that can help you minimize risk and make the concept to commercialization process successful. Take the next steps today:

Unlock growth in new formats.

Work with specialists who can help you optimize pouch design and manufacturing. We have the tools to facilitate collaboration, ideation, rapid prototyping, consumer insights and package testing.

Leverage relationships with key partners.

As an industry leader, Bemis already works closely with top fitment providers, machine manufacturers and comans across the country. Tap into our powerful and robust network.

Accelerate your speed to market.

Talk to a Bemis packaging expert to apply our insights to your toughest challenges and quickly move from concept to commercialization.

Bemis is here to help—contact us today!

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