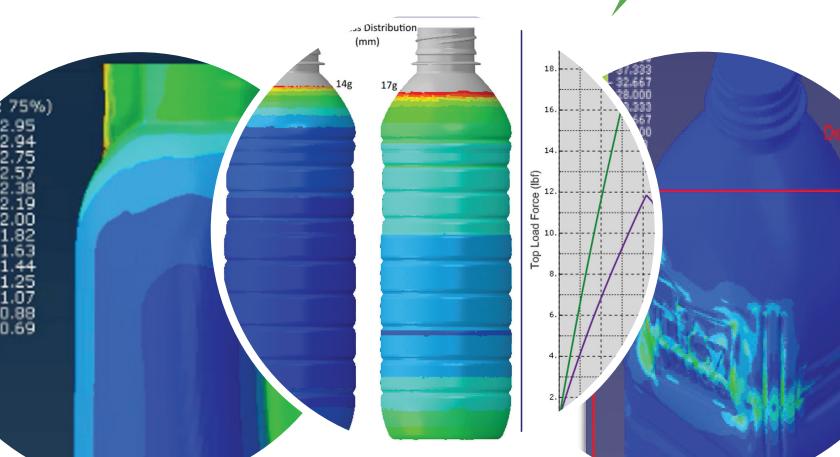
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## Six Reasons Why the Package Design Process Should Use Predictive Modeling

An ideal read for marketing/brand manager, packaging designers, creative talent, technical managers responsible for design, bottle suppliers and converters in the beverage, food, household chemical and personal care industries.





Wouldn't it be great if the creative side of the packaging development process could have access to an invisible engineer that could guide the process? Sound far-fetched? Perhaps, not.

"Creatives" excel in unleashing out--of--the--box thinking. Their fresh ideas stimulate consumer appeal and brand popularity. Creatives feed on non--conventional thought and market intelligence data to develop outstanding new concepts. However, wouldn't it be great if those processes were aided by a virtual resource lurking in the background providing valuable guidance to help determine if design concepts can be turned into viable, manufacturing realities?

Predictive modeling—part invisible engineer, part crystal ball—is the tool that can take the guesswork out of the design process. It can ensure design intent and performance criteria are met while still in the virtual space.

1. Design needs to be backed by solid engineering fundamentals.

Creative design is often needed to freshen the brand image. Out-of-the-box thinking is often a key component in enhancing shelf appeal. These design intents need to be backed by proven engineering fundamentals to steer the container shape in a path that is both practicable and robust, while meeting desired performance criteria. Virtual design engineering is your roadmap to success for these challenging endeavors.

### 2. Narrowing options to the most commercially viable.

Design inputs often turn into a large unmanageable matrix of options that leave the brand owner torn deciding which concepts to invest money for prototyping and testing. Virtual design engineering can not only help screen these multiple, and often complex design choices, but also provides valuable learning resulting in a more robust package.

#### 3. Shorten speed-to-market.

Virtual design engineering provides users with package choices that can be quickly vetted without building expensive molds, fabricating parts and performing exhaustive testing. These virtual tools can facilitate a faster design--to--commercialization process. They will allow you more flexibility and capability to enable quicker decision making than what has been previously available.

#### 4. Simulation can benefit both function and process.

The consumer preference for design functionality, coupled with the need to improve the manufacturing process, can only be realized when both are combined via simulation modeling. Modeling allows the functional properties to be evaluated against the manufacturing process requirements or limitations. This combined approach shows the benefits of comparing multiple design concepts and the impact each has on manufacturing processes.

#### 5. Facilitates creativity.

Virtual design allows a creative designer to juggle between shoulder styles, base stability, handles or grip designs and different closure systems. Tweaking all of these is necessary to get the desired consumer impact. Multiple design combinations and features can be analyzed while allowing for creative design intent to be captured. The outcome is a matrix of the best attributes for any given application.

#### 6. Manufacturing platform selection.

Virtual design engineering will assist designers by helping determine which manufacturing platform(s) is ideal for concept implementation. It can also assist in determining which material can support the intended functionalities.

These are just some of the ways virtual design engineering can benefit the creative process. Software can be deployed to help you make the right selections without you ever losing control of your creativity and design intent. In the long run, this process can help save hours of work by narrowing down options that manufacturing can successfully implement.

#### About PTI

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