



# How Big Brands Highly Profit from Lightweight Luxury Packaging.

Three Crucial Steps for Innovative Luxury Packaging.

WHITEPAPER



# Innovative luxury packaging to create a holistic customer experience

While nowadays, luxury packaging includes a functional design and minimal structures. Moreover, the human perception of luxury strongly depends on the personal touch & feel, which in turn, depends on colour, material and engineering structure. But not only do consumers want the best look and feel. They want a luxurious experience while minimizing their carbon footprint. As a result, there seems to be an ever increasing popularity for Lightweight Packaging in areas like fashion, cosmetics, and consumable products.

## The right experience weakens the competition

Integrating innovation in packaging is one of the pillars of consumer industry competitiveness. Experience teams enable luxury industries, e.g. Louis Vuitton, Moët Hennessy, Apple and Nike, to respond to fundamental consumer trends, like the desire for quality, lightweight materials and the consumer's own unique tactile experience.

A company that neglects the importance of coating possibilities in particular, not only weakens its competitiveness, but also misses the opportunity to present their product in a way that will catch the consumer's attention. In the following sections, I will explain how new innovative compounds can create luxury appeal, diversify the product, and reduce the carbon footprint.

- Soft Silky, Light Velvet or Subtle Rubber Touch
- Light Colour Tones or Flamboyant Expressions
- Minimalistic Designs or Lightweight Materials

## 1. Brands choose the right Soft Feel Experience

Luxury packaging can be recognized through both look and touch of the surface. As people touch a certain surface, the forces and vibrations generated in this frictional contact are processed by our brains into our sensory experience of "feel". The soft and matt finish of an Apple iWatch cardboard box, the smooth bevel of a Gucci perfume bottle, or the velvet feel of a premium Veuve Cliquot package, all communicate something at every single touch point. Soft structure and a unique haptic experience speak to quality and innovative craftsmanship, both virtues of luxury.

Uncoated papers, plastics or metals on the other hand, simply do not fulfil what top quality retailers and consumers expect. Instead, various varnishing, coating and printing techniques need to be applied to materials that will result in a luxury standard for packaging.

**But with regards to more sustainable packaging, how can this be realized without adding matting or resistances agents and toxic compounds?**

### One Component Water-Borne Soft Feel Coatings for Surfaces

In the past, soft-touch coatings were predominantly two-component, solvent borne polyurethane systems. The push to reduce the Volatile Organic Compound (VOC), content of haptic coatings led to a shift away from solvent-based formulations to waterborne or ultraviolet (UV) cured systems. Today, a new waterborne UV curable range of resins combines the same soft-touch properties as other waterborne polyurethanes, but with enhanced chemical and mechanical resistance properties. With an original one-component waterborne technology, these newly developed polyurethane dispersions (PUD's) form a matt, soft feel coating upon the evaporation of water, resulting in low gloss without the need for matting agents and/or additional crosslinking mechanisms.

### One Component Coating Benefits the Packaging Industry

Different industries use different formulations for soft-touch coatings based on the required balance of cost and performance. For instance, more durable and chemically resistant coatings usually cost more to produce from scratch. However, with polyurethanes increasing in dominance in soft-touch applications, luxury packaging is provided with a wide formulation base of excellent properties like chemical resistance, scratch resistance, durability, weathering and ease of application.



## 2. From subtle Colour Enhancement to flamboyant Colour Boos

**In order to create the holistic experience for your customers, just like the feel of your coating, colour plays a vital role in packaging, as it promotes immediate recognition.**

But colour also influences the consumer's perception of quality, environmental credentials, taste, aroma, freshness, and so on. Not surprisingly, many brand owners have famously taken steps to achieving legal control of their chosen brand colour.

### **Colour Consistency for Immediate Brand Recognition**

In these cases, colour must be consistent across all types of presentations to achieve the presence desired by the brand owner. Failure to achieve a particular colour in all its nuances and a lack of consistency can deplete brand impact. Compound innovation, especially with regards to varnish, coating, and ink, is crucial to maintaining a competitive edge in the ever-changing packaging market. Eventually, packaging producers must be equipped with the means to display brand colours adequately, ensuring that the consumer connects the product with the qualities and attributes they appreciate about the overarching brand, eventually stimulating the purchase of the actual product.

### **But how can this be achieved when a colour is often distorted by the coating?**

From custom papers and coatings to colours with custom effects, luxury and prestige is a matter of restraint, not excess. The current trend of minimalist design and discreet luxury in packaging for that reason requires top quality when it comes to colour enhancement. As light interacts with materials and finishes differently, many manufacturers realized that the targeted colour is often not achieved. It became clear that it is hard to ensure a smooth and crisp stock, which is consistent in colour. However, this problem disappears with the new waterborne or ultraviolet (UV) cured coatings. With these innovative coatings, colour consistency can be achieved, while at the same time meeting the latest colour trends.



### **High Optical Transparency to Enhance Colour**

For example, the earlier mentioned soft touch waterborne polyurethane coatings can be cast in very thin films (0,2  $\mu$ m) with a high optical transparency. This way, the surface finish can evenly distribute light across the thin sheet without any imperfections or the need to add further matting agents. They offer desirable aesthetic features such as creating contrasting surfaces, reducing sheen and enhancing colour depth.

### **Finding the perfect roughness**

In order to test the surface topography of these PUD's, roughness profiles were analysed using white light interferometry. It is well known that the gloss of a coating depends on the angle the incoming light beam makes with the coating surface. For these PUD's, it's intrinsic roughness of the surface influences the colour less than any other surface, physically roughened in the same degree. So they have less colour influence at the more sensitive lower angles (approximately 20°) and practical no colour influence at higher angles (approximately 85°).

## 3. The last step towards a holistic customer experience: Lightweight packaging

Instead of stopping after providing a luxury feel and look for your packaging, choosing the right structures and materials is crucial to create the true experience customers want. As mentioned earlier, consumers are increasingly appreciating reduced environmental impact. According to a recent study done by Smithers Pira, the most common sustainable packaging trends are:

- Downsizing (minimal packaging structures) and light weighting
- Increased recycling and waste recovery
- Improvements in packaging and logistical efficiency

These play into the hands of luxury packaging designers, who are combining modern cubism with minimalist visual design and clean use of plain space. Where curves meet straight edges for visually bewitching packaging design, there is no need for additional packaging gadgets, such as ribbons, separable lids, or extra thick varnishes.

### Durable and Lightweight Luxury

Sustainable packaging solutions are demanded by consumers and businesses alike. **As a result, packaging engineers should avoid toxic compounds like NMP or APE and reduce weight as much as possible.** With a renewed focus on carbon reduction, it can be claimed that packaging minimisation is here to stay. Another way to contribute to waste reduction is a focus on coatings and varnishes, like the earlier mentioned PUD's. A waterborne coating that provides the thinnest finish with the best look and feel. And has the advantage of not needing any additional matting agent nor extra agents for physical resistance. As a result, such polymers can be cast in ultra thin films, perfectly matching the demands for Lightweight Luxury Packaging.

**So in terms of Package Experience Innovations it all comes down to the personal Touch & Feel, which is strongly influenced by the dimensional design and the functional structure, the material and message of the right fitting colour.**

### The Best Brands in the World make use of a Haptonomic Team

If you are interested in developing the best packaging for your business. There is a haptonomic support team that tests the high standards of touch & feel experiences by mapping out the wide range of soft feels from silk or light velvet to subtle rubbery. Bringing this in balance with form, material, structure and colour is the biggest challenge in packaging nowadays. Our quantitative research on haptic experiences for Lightweight Luxury Packaging profits all big brands and all promising brands.

If you want to know more about the Haptonomic Team or high performance luxury packaging, please do contact us via email: [info@covestro.com](mailto:info@covestro.com)



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<sup>1</sup>Please see the "Guidance on Use of Covestro Products in a Medical Application" document.  
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