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UNVEILING CONSUMER PERCEPTIONS OF SPECIAL EFFECTS IN COSMETIC PACKAGING: A CASE STUDY TO METSÄ BOARD



TIIVISTELMÄ

Tässä opinnäytetyössä tarkastellaan kosmetiikkapakkauksissa käytettyjä erikoisefektejä ja niiden herättämiä mielikuvia kuluttajisssa. Tutkimuksen tavoitteena oli selvittää, millaiset erikoisefektit kommunikoivat kuluttajille tuotteen houkuttelevuutta, ekologisuutta ja premiumiteettiä. Tutkimuksessa selvitettiin myös, kuinka pakkausten erikoisefektit vaikuttavat kuluttajien maksuhalukkuuteen. Lisäksi selvitettiin kuluttajien yleinen suosikki kaikista vaihtoehdoista. Tutkimuksessa käytettiin kuutta erilaista erikoisefektiä, tai erikoisefektiyhdistelmää.

Tutkimus toteutettiin kuluttajatutkimuksena ja siinä keskityttiin osallistujien aistinvaraisiin havantoihin ja niissä tapahtuviin muutoksiin tutkimuksen aikana. Tutkimus jaettiin kahteen osaan, jossa ensimmäisellä kierroksella kuluttajat arvioivat pakkauksia näköaistin perusteella ja toisella kierroksella näkö- ja tuntoaistia hyödyntäen. Aineisto on koottu viidestäkymmenestä vastauksesta.

Tutkimuksen tulokset osoittavat, että erikoisefektit vaikuttavat selkeästi kuluttajien mielikuviin kosmeettiikkakategoriassa. Tämän tutkimuksen tulokset viittaavat siihen, että kuluttajat suosivat kohokuvioituja ja kiiltäviä premiumiteettiä kommunikoivia kosmetiikkapakkauksia ja nimeävät kosmetiikkapakkausten ekologiset ominaisuudet yksimielisesti samankaltaisiksi.

Näillä tuloksilla on merkittäviä vaikutuksia niin brändien rakentamiseen kuin muotoiluprosesseihinkin. Suunnittelijat voivat hyödyntää tutkimustuloksia ja perustella tekemiään muotoiluvalintoja niillä. Opinnäytetyö tarjoaa myös tietoa ja näkökulmia pakkausten valmistajille sekä kosmetiikkabrändeille. Tutkimuksen tulokset korostavat kuluttajatutkimuksen tärkeyttä osana onnistunutta pakkausmuotoilua, jossa suunnittelun keskiössä pidetään käyttäjälähtöisen muotoilun periaatteiden mukaisesti kuluttajien mielipiteitä.

ABSTRACT

This thesis is a research about the special effects used in cosmetic packaging and the images they evoke in consumers. The goal of the study was to find out what kind of special effects communicate the product's attractiveness, ecology and premiumity to consumers. The study also found out how the special effects of packaging affect consumers' willingness to pay. In addition, consumers' general favorite of all options was determined. Six different special effects, or combinations of special effects were used.

The study was carried out as a consumer study and focused on the participants' sensory perceptions and the changes that occur in them during the study. The research was divided into two parts, where in the first round, consumers evaluated the packaging based on the visual sense, and in the second round, using the senses of sight and touch. The data is compiled from fifty answers. The results

of the study show that special effects have a significant impact on consumer perceptions in the category of cosmetics. The results of this study suggest that consumers prefer embossed and shiny cosmetic packaging that communicates premiumity and unanimously name the ecological properties of cosmetic packaging as similar.

These insights have significant implications for brand building and design processes. Designers can use the research results and use them to justify the design choices they make. The thesis also provides information and perspectives for packaging manufacturers and cosmetic brands. The results emphasizes the importance of consumer research as part of successful packaging design, where consumer opinions are kept at the center of the design in accordance with the principles of user-oriented design.

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PARTIES & TOPIC SELECTION

1.1 INTRODUCTION

PRESENTATION OF THE SUBJECT AND ITS TOPICALITY

This thesis presents research on consumer perceptions of the special effects used in cosmetic packaging. The thesis combines a review of packaging tasks and the importance of packaging development, an evaluation of the current cosmetic market and cosmetic packaging legislation in Europe, and a description and assessment of cosmetic products from special effects in packaging perspective. Incorporating the implementation of a consumer study, this thesis provides a comprehensive description of research methods and study preparations. The outcome of this thesis is fresh information on the use of special effects in cosmetic packaging, obtained through consumer research. The aim of the study is to explore consumer views on the special effects used in cosmetic packaging, as well as to find out which attributes communicate attractiveness, ecology, and premiumity to consumers. Implementing consumer research on this theme is a timely and relevant topic, given the growing global concern for sustainability issues and the increasing demand for eco-friendly products. Consumers are becoming more and more conscious of the impact their choices have on the environment. The more information consumers have about the topic, the more it is reflected in their purchasing decisions. This study addresses

the topic especially from ecologicality and premiumity points of view.

The beauty industry has raised their interest in environmentally friendly and sustainable products. Consumers are increasingly interested in products that have minimal impact on the environment, and in this context, packaging is truly a crucial aspect. Conducting consumer research on the special effects of cosmetic packaging can provide valuable insight into consumer preferences and behaviors, as well as their attitudes toward sustainability and ecologicality. The study can help to identify which elements in the special effects of cosmetic packaging communicate ecologicality to consumers. Premiumity is also often associated with cosmetic products, and therefore it is interesting to find out the similarities and differences between the attributes of ecological and premium effects. This research can also help to determine how consumers perceive premium packaging, and what factors influence their willingness-topay. Additionally, this study can provide valuable insight into developing and communicating ecological and premium cosmetic packaging by helping designers and companies in the industry to understand the preferences and needs of their target audiences.

1.2 CLIENT & COOPERATION

METSÄ GROUP & METSÄ BOARD

Metsä Group is a forest industry group with strong roots in Finnish nature. The company manufactures fossil-free products from responsibly grown, renewable woods. Sustainable development is ingrained in everything Metsä Group does – from the forest to the products. The main raw material wood comes from sustainably managed northern forests. Every part of the tree is used as efficiently as possible. Metsä Group is moving towards a world guided by bio and circular economy. (Metsä Group a.)

Metsä Board operates as a part of Metsä Group (Metsä Group b.). Metsä Board specializes in light and high-quality folding and serving packaging boards, and white kraft liners. Together with their customers, Metsä Board develops innovative packaging solutions to create better consumer experiences with smaller environmental impacts. Customers are helped to promote their business and responsibility goals with packaging boards that support circular economy, and material and packaging innovations that utilize top technology. Together with partner organizations, Metsä Board constantly innovates and develops global solutions for future packaging challenges.

COLLABORATION

In late summer of 2022, the author contacted Metsä Board and applied for a thesis topic. Learning about the author's work history as a cosmetics advisor in pharmacy, Ilkka Harju, Packaging Services Director for Metsä Board, combined the author's skills with Metsä Board's needs. A live meeting took place at the Pack Summit Fair in Tampere in October 2022, and the first research topic meeting was held soon after.

The cooperation was confirmed and started in November 2022. On behalf of Metsä Board, Mr. Harju was responsible for the packaging designs and ordering the mock-ups with different special effects from manufacturers. The author accomplished wide background work and benchmarks, and prepared, implemented, analyzed and visualized the consumer research and its results. The special effects and shapes and sizes of the packaging samples were chosen together.

SENSE N INSIGHT

Sense N Insight offers its customer companies packaging concept testing services and other expert services related to packaging labeling, food legislation, and packaging development. Each consumer study is individually tailored according to the specific needs of the customers. Sense N Insight provides easy-to-understand information to support decision-making related to packaging solutions. The result is packaging that sells and markets the products better than competitors. Measuring the shelf differentiation of the package is a simple process that should be carried out well in advance before choosing the final design. If the consumer does not see the packaging on the store shelf, it is 100% certain that it will not end up in the shopping cart.

By studying the user experience, the consumer's perceived value and willingness-to-pay can be determined. The packaging experience is created through multisensory interaction between the consumer and the packaging. Sense N Insight operates in Myyrmäki, Vantaa. The research facilities enable different research setups, e.g., eye-tracking in a 3D-modeled store environment, group interviews, and different sensory evaluations with products or packaging concepts. (Sense N Insight.)

COLLABORATION

In February 2022, the author started a six-month internship at Sense N Insight as an assistant to Managing Director Virpi Korhonen. The author met Ms. Korhonen at Aalto University while completing Pack-Age minor studies. The internship at Sense N Insight was a versatile experience that completely met and exceeded all author's expectations. The author had the opportunity to acquire a comprehensive picture of the different areas of the packaging industry, participate in inspiring projects, and meet interesting people and company representatives. Sense N Insight and Korhonen offered the author a peak vantage point into the field of packaging.

After the internship, the author was employed by Sense N Insight. Through another project, Korhonen introduced the author to Metsä Board's Harju, who ordered the packaging research carried out in this thesis. On behalf of Sense N Insight, Korhonen has acted as a supervisor of the thesis process, and preparations and implementation of the research.

1.2 TOPIC SELECTION AND LIMITATION

Metsä Board wanted to find out the most potential special effects in cosmetic packaging that communicate ecologicality and premiumity, and are attractive from consumer point of view. The objective was to compare different special effects. Metsä Board's Packaging Services Director Ilkka Harju wanted to research the most common special effects in cosmetic packaging. The research forms the basis for an upcoming French article that Harju has promised to co-write. The article is titled "Is sustainable ugly?" and it set a goal for the thesis to find out the opinions about special effects from the consumer point of view. Metsä Board can also utilize the mock-ups manufactured for the research for display purposes at fairs and exhibitions.

The research was carried out as a consumer study by Sense N Insight. The results of the research can be used to support Metsä Board's future packaging design processes, as one of the corporation-wide values of Metsä Group is "responsible results" (Metsä Group c.). Since the research will be published, other companies in the industry can also use the results to support their product design-related decision-making processes.

As cosmetic packaging is a very broad topic, delineation of scope is an important part of the whole thesis. With Metsä Board, it was easy to limit the scope to packaging material paperboards. Based on the previously mentioned upcoming French article and consumer research conducted in Finland, it is reasonable and justified to limit the background research of the study and benchmarks to only cover the European region, focusing primarily in Finland. Previous work background as a cosmetics advisor in a pharmacy has given the author good insight and knowledge of the cosmetics markets close to the consumer interface. The first inspiration to study packaging design came from the category of cosmetic products sold in pharmacies. This opportunity to research special effects in cosmetic packaging is, in its way, closing one circle.

O2 BACKGROUND

2.1 PACKAGING FUNCTIONS AND DEVELOPMENT PERSPECTIVES

Säilä (2021a., 14) states that packaging is often necessary for the product. The primary function of packaging is to protect the product from various stresses. The packaging protects, for example, fragile products from impacts and cold-sensitive products from frost. Conversely, the function of packaging may also be to ensure that potentially toxic content will not be in contact with its environment. The packaging also tells about the safety of the product. Sealed, unopened packaging communicates to the consumer that the product is untampered. The packaging facilitates the handling of the product at each stage of its logistics chain. At the beginning of the logistics chain, there are often automated packaging lines which have their own requirements for durable packaging. Precisely defined features enable efficient and functional packaging lines.

In the next logistics phase, to facilitate transportation and storage, products are protected with different packaging combinations. For example, properly dimensioned packages both protect and fit precisely on pallets and there is no

wasted space during transportation. In addition to fitting on pallets, packages must withstand handling and storage in various widely used systems in storage centers. In addition, for certain product categories-such as medicines, foodstuffs, and cosmetics- there are legal requirements for packaging labels, which direct the manufacturer to provide the most relevant information about the product to consumers. (Säilä 2021b., 15)

From a marketing point of view, packaging can help to communicate a brand's mission, personality, and values. Packaging plays a significant role in building a brand, and by investing in visual elements the packaging can be used to make the brand easily stand out on the shelves. Unique and suitable packaging can increase brand recognition. Amidst growing market competition in recent years, it has become more and more exceedingly important for companies to make an impact on consumers' purchasing decisions and affect generate brand loyalty through effective packaging design.

2.1.1 THE IMPORTANCE OF PACKAGING DEVELOPMENT

Companies can and should create new and innovative packaging solutions, that effectively communicate the product's features and are most valued among consumers and encourage them to make a purchasing decision. Added value is created when the packaging is designed to be aesthetic and communicate positive information to consumers while preserving the properties of the product. (Gonzalez, Thornsbury & Twede 2007, 62-63.) In Finland, the packaging industry is lacking a comprehensive perspective of all factors that should be included in product and packaging development processes. Instead of consumer views, design is driven by instructions and constraints of technology, money, or time. The most suitable and affordable priced packaging design does not necessarily bring the maximum value and return on invested capital for either the brand or consumer. (Josephy et al. 2017, 17.)

Kuvykaite et al. (2009, 446) predict packaging could be treated as one of the most important factors influencing consumer purchase decisions, as it performs a major role in marketing communications. The role of packaging in marketing communications is increasing: the packaging must attract attention and convey sufficient product value to the consumer in a short period of time. They justify the necessity to explore packaging and its elements in more detail, in order to understand which elements most affect a consumer purchase decisions.

Overall, by providing convenience, protection, marketing possibilities, and sustainability benefits, packaging development plays a critical role in the success of a product.

2.1.2 SUSTAINABILITY ASPECTS

Sustainability is a broad concept, and it extends to almost all aspects of people's lives. It guides consumers in their everyday activities to an ever-increasing extent. Sustainability is valued, as it is used to justify purchase decisions and choices. Modern brands reveal their entire production processes transparently and make it as easy as possible for the consumer to understand the sustainability of their products. In the best case, various eco-labels and certificates help the consumer to make sustainable choices, but they can also mislead and confuse. Without clear measurements, it is very challenging for consumers to find comprehensible information about the real sustainability of products.

In the packaging industry, sustainability aspects are present throughout the entire value chain. Packaging sustainability is affected at all stages, from material selection to manufacturing, from logistics to communication of recycling instructions, and finally to the proper disposal of packaging- which is the responsibility of the end user. Therefore, even a very sustainably designed product may become waste at the end of its life cycle, if it is recycled and collected incorrectly.

SUSTAINABLE DEVELOPMENT

Sustainable development, on the other hand, is a term that supports consideration of sustainability in decision-making. The Ministry of the Environment of Finland (2023) suggests that sustainable development is global, regional, and local continuous and controlled social change, the goal of which is to secure good living opportunities for current and future generations. This also means that the environment, people, and economy are considered equally in decision-making and operations.

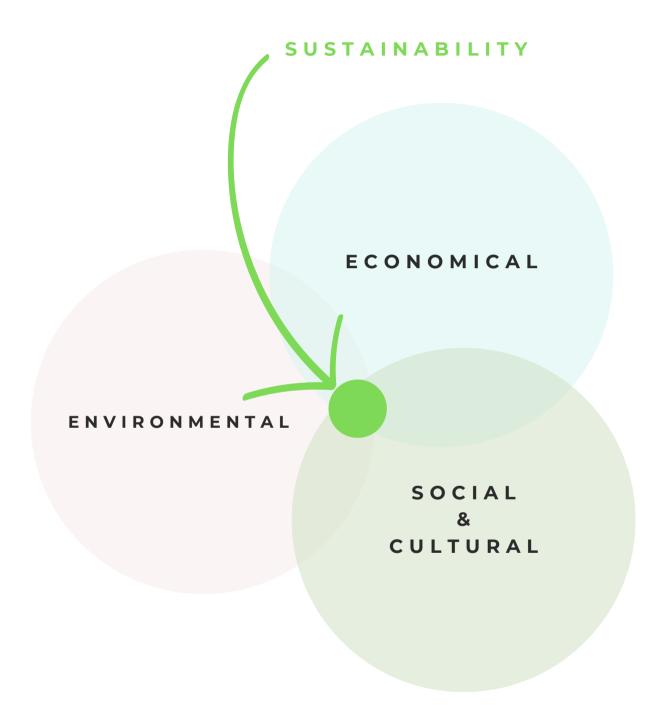


Figure 1. Three pilars of sustainability (in accordance with PakTech, 2019a.)

Sustainable development was already emphasized before 90's century in Our Common Future report. The report used the so-called three-pillar idea to describe the theory that balancing social, economic, and environmental aspects is essential for the realization of sustainable development. It clarified that the process requires an equal emphasis on each of the three pillars (Figure 1) to actually be sustainable development (World Commission on Environment and Development, 1987, 43.) According to Circular Ecology (Circular Ecology.), the aspects can be described in the following way:

- Environmental aspect: Environmental sustainability means that we are living within the means of our natural resources. We need to ensure that we are consuming our natural resources at a sustainable rate.
- Economic aspect: Economic sustainability means using an organization's resources responsibly so that it can operate sustainably and generate operational profit.
- Social aspect: Social sustainability is the ability of a society to achieve lasting good social well-being. Achieving social sustainability ensures that the social well-being of the community can be maintained in the long term.

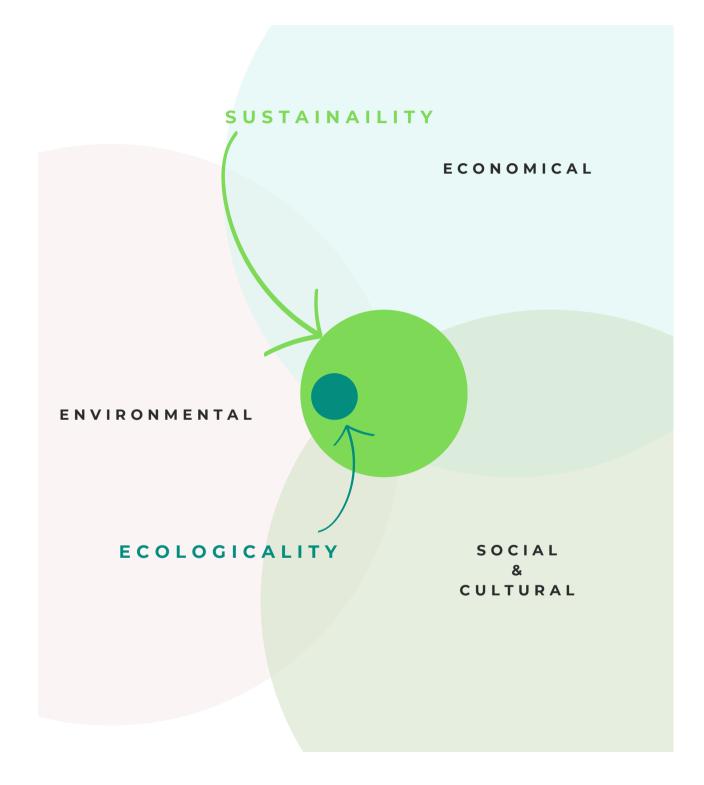


Figure 2. The placement of ecologicality in the area of sustainability (in accordance with PakTech 2019b. and Teorra 2022c.)

THE DIFFERENCE BETWEEN SUSTAINABILITY & ECOLOGICALITY

Teorra (2022a.) suggests that ecologicality means aiming to have a minimal impact on the environment. Ecological products are often made from natural, biodegradable materials, and have smaller carbon footprints than regular conventional for example fossil-based products.

Sustainability, on the other hand, is designed to meet the needs of the present generation without compromising the ability of future generations. Sustainable products consider the social, economic, and environmental impacts of their production, use, and disposal. It is a broad concept, and therefore the definition of a "sustainable product" is hard to formulate. (Teorra, 2022b.)

It can be stated that while ecological products primarily focus on reducing their environmental impacts, sustainable products take a wider view (Figure 2) of their impact on the economy, society, and the environment. Both concepts are important for promoting environmentally responsible behavior and minimizing the impact of human activities on the natural world. Although ecologicality and sustainability are both broadly seen as key issues from the packaging industry perspective the definition is still relatively hard to articulate from the consumer point of view. This study specifically examines views on the concept of ecologicality.

2.1.3 PREMIUMITY ASPECT

The terms "luxury" and "premium" are often used interchangeably, but they have specific meanings of their own. This thesis will specifically address the premium status products achieve through their packaging and the use of special effects, not luxury products or their properties.

According to Hopper (2021), luxury is described as exclusivity, timelessness, and superior craftsmanship, whereas premiumity is characterized by a higher quality-price ratio than non-premium products. Luxury labels also offer products that are made by hand or only produced in a limited edition, while premium products are mass-produced from high-quality materials.

Luxury is often associated with high prices, rarity, uniqueness, and personal connection. The pursuit of luxury is often related to the consumer's psychological and social motives, such as self-expression or to gain esteem and social status (Okonkwo 2007, 3-4). People today desire more premium products, although some temporary changes in

purchasing behavior may be seen due to the recent global instability and price increases of essential commodities.

It is crucial to identify the features that communicate high quality to meet the consumers' higher expectations in a premium category, for which they are willing to pay above average compared to everyday products. Ashraf et. al. suggest that those who seek a premium product look for a higher price level, better quality, and brand reputation or recognition. Demand for such products is based on several factors affecting consumer behavior toward purchasing such premium products. (Ashraf et al. 2017, 621.)

Packaging development plays an essential role in the success of a premium product. In fact, the packaging of a premium product is often seen as an extension of the product itself and is expected to be of high quality and visually appealing.

2.2 FACTORS GUIDING CONSUMPTION HABITS

Consumption habits refer to the way goods and services are purchased. The factors that can affect consumer consumption habits include for example income levels and other economic factors such as inflation or recession. Consumers' age, gender, education level, and cultural background can all influence their consumption habits. Lifestyles and personal values also guide their decision-making processes. Some products or services availability may be impacted by unexpected changes in the world- such as pandemic, environmental disasters or war. This directly affects consumption habits globally. According to Solomon, other factors closely related to decision-making are advertising and marketing campaigns. The growth of online shopping and the increasing use of mobile devices can greatly influence consumer consumption habits (Solomon 2018, 6-9).

Based on a consumer study by FIBS (2022, 4-7), 65% of Finnish consumers say that responsibility guides them in their consumption habits. Based on the research, attention is paid to responsibility especially when the product comes feels close to the consumer in

some way. Consumers paid the most attention to the responsibility of food (52%) and clothing (42%), but the responsibility of detergents and cleaning products (29%) and make-up and other cosmetic products (25%) also arouses interest more often than other categories. However, according to the survey, feelings and preexisting perceptions rather than evidence-based opinions influence consumer choice. This is because only 6% of the consumers who participated in the study felt it is easy for them to choose responsibly when comparing products. Making responsible choices is complicated, for instance, by the difficulty in finding information regarding a product's responsibility at the time of purchase. One in five thinks that the higher price of a more responsible choice makes it difficult to choose the product.

When designing new consumer goods it is important to consider the target group throughout the entire design process. It is important to find out the consumption habits of the target group, so that the product meets or even possibly exceeds the consumers' expectations.

2.3 COSMETICS BUSINESS

The statistics (Cosmetics Europe a.) claim that an average Finn spends approximately 180 euros a year on cosmetics. Alongside the USA, the European cosmetics and personal care market is the largest in the world. The total retail sales price market in 2021 was valued at 80 billion euros. The majority of 500 million Europeans use cosmetic and personal care products daily to maintain their well-being, health, and to boost their confidence. Cosmetics play an essential role throughout our lives and support and boost our functional and emotional well-being. Cosmetics range from personal hygiene items such as toothpaste, soap and shampoo to fragrances, make-up, and lotions. Most of the international cosmetics market is composed of personal hygiene products (47%) and skincare products (27%).

After the pandemic years, the biggest growth is predicted for makeup and skin care products. The demand for natural cosmetics and anti-aging skincare products continues to be strong. Besides being the biggest trendsetters, the two leading countries in skincare routines and beauty products are South Korea and Japan. (Kurjenoja 2021.) In Finland, the consumption of make-up is expected to grow by 40 percent from 2020 to 2026. The sales of cosmetics and personal hygiene products increased by 4% in Finland from January 2022 to June 2022, already reaching a higher level than before the pandemic. (Karine 2022.)

According to statistics (Cosmetics Europe b.), 94% of women and 87% of men in the UK use deodorant products, while in France, the usage of liquid shampoo among adults accounts for 98% of women and 94% of men. The frequency of usage can vary across countries. Consumers' age, gender, and different products used affect the cosmetics usage percentages. Cosmetic products are an essential part of our everyday life, and we use an average of seven products daily. Cosmetic products have an impact on our quality of life, well-being, self-esteem, and social interaction.

Since the cosmetics business occupies a significant area in the trade sector worldwide, it is topical to find out more about the preferences of consumers regarding cosmetic packaging. More sustainable solutions can be justified with fresh information regarding material choices, packaging design, and the production methods needed for the effects. The aim in the design process always stays the same: creating ultimately pleasing packaging for consumers' needs, and increasing the willingness-to-pay for the product without compromising on quality.

2.3.1 STANDARDS AND REQUIREMENTS IN EUROPE

The EU cosmetics regulation lists all the labels required for cosmetics products. In addition, according to the Finnish Cosmetics and hygiene industry association (Kosmetiikka- ja hygieniateollisuus ry a.), the national law on cosmetic products (492/2013) determines which labels must be in Finnish and Swedish. The cosmetic products packaging must contain the following information:

- name and address of responsible producer
- country of origin
- amount of content
- shelf life if the product is stored for a maximum of 30 months
- shelf life after opening if the product is stored for more than 30 months
- precautions to be followed in use, if any
- batch number
- intended use of the product, if it is not clear from its presentation
- list of ingredients

The list of ingredients informs the consumer what the product contains. The ingredients list should to be accessible to the buyer on the outer surface of the packaging without having to open it. The ingredients are listed by weight in descending order of magnitude — specifying the international INCI names of the cosmetic ingredients, if available. The international nomenclature helps identifying the substances used in the product, regardless of where consumers buy the product in Europe. If there is no INCI name, the ingredients are reported with the specific identifier or generic name of the ingredient. (Kosmetiikka- ja hygieniateollisuus ry b.)

During the design process of a cosmetic packaging, various legislative issues must be considered and added to the packaging visuals. Many things besides an attractive design must be considered to ensure that the packaging is legal, suitable for the target group, as sustainable as possible, and still stands out.

BENCHMARK

ABOUT THE BENCHMARK

Benchmarking is defined as systematic comparison, evaluation, and learning from other operators, regardless of industry. The goal is to acquire knowledge and insight that can be utilized in the effective development of one's own operations and products. (Oboloo.) To describe the current market situation, this benchmark consists of three separate benchmarks.

The benchmark implemented in walk-in stores established that cosmetics are divided into four general categories by their attributes and the sections they are mostly sold in: natural cosmetics, premium cosmetics, dermo-cosmetics, and everyday cosmetics. In many stores the cosmetic department is divided into separate shelf sections based on the types of product or brand. Similar product categorizations can also be seen in various online stores. Some brands can fit into many categories, and this categorization is not official. A professional cosmetologist at Yliopiston Apteekki (Lappalainen 2023a.), commented on the created categories to ensure that they were realistically divided and reflected current trends and consumer behavior.

This benchmark starts with a walk-in store benchmark. The presented benchmark was achieved by exploring the cosmetic

product packaging and gift packaging available at Yliopiston Apteekki, Sokos, Stockmann, Prisma and Ruohonjuuri, all largechain stores and cosmetics retailers in Finland. The goal was set to investigate the special effects used in the cosmetic packaging and how the products were positioned on shelves and display stands. Special attention was paid to the special effects researched in the up coming consumer study. These effects are presented in detail in Chapter 4. Online stores operating in Europe were selected for online store benchmark. They are all popular in both, Finland and Europe. Some online stores have a walk-in store concept, but most of them operate only online.

As this study is a thesis work of a graduating design student, the last benchmark was generated from Pinterest. Pinterest is an online platform and application describing itself as a visual discovery engine for finding ideas like recipes, home, and style inspiration, and more (Pinterest). Designers use Pinterest as a mood board to spark inspiration. In the area of packaging, Pinterest searches bring up not only commercialized ideas and inspiration, but also concept-level works and design tasks. The benchmark was carried out by searching for results using as search terms the main keywords of this research theme.

3.1 WALK-IN STORES

NATURAL COSMETICS

Natural cosmetics are cosmetics that are primarily formulated from minimally processed ingredients of natural origin (Ruohonjuuri). Natural cosmetics shelves are versatile. Ecological and natural themes can be seen in the packaging e.g., in

- color choices (earthy colors, green, flower graphics, natural and uneven colors...)
- material solutions (cardboard, other wood-based materials, sugarcane, industrial by-products, etc.)
- branding, e.g., with different shelf tags and displays.

Recyclability is often mentioned or emphasized in the packaging of natural cosmetics. Different eco-labels are also easy to find in the products of this category. Innovative new material solutions are used in the packaging in addition to recyclable materials. Fibers, for instance, can be collected from an industrial side stream and be further processed into packaging material instead of being disposed.

Natural cosmetics packaging covers a wide spectrum, varying from colorful graphics to very restrained, reduced, and minimalistic packaging (Photocollage 1, 2023). Illustrations on the packaging often prefer nature-related themes. Hardly any special effects is found on the store shelf of natural cosmetics. Some foiled texts or individual elements highlighted with foil were noticed, but overall hardly any embossing or other special effects was seen in this category of products.











Photo collage 1. Selection of natural cosmetics in walk-in stores (Saara Alanko 2023)

PEEL

PREMIUM COSMETICS

Premium cosmetics stand out on store shelves with their appearance. The brand section invites customers with gilded and decorative signs glowing above the shelves -visuals and atmosphere associated with premiumity, that reflect the packaging placed on display. Often the brand name is the most visible part of a premium packaging, as many consumers choose products based first on the category in general, before looking at the different brands.

As seen in Photo collage 2, the use of golden and shiny foil in many of the packagings is clearly visible. In premium brands, sales packaging made of paperboard is often seen, yet some of the packages are still separately plasticized to cover the packaging, or for attachment of an alarm. Overall, foiling and gloss varnishing creates a premium feeling and makes both the packaging and product look more high-class. It is especially notable that many expensive brands have no sales packaging visible on the store display. Only a tester of the product is available to customers, before contacting the staff to buy the product.









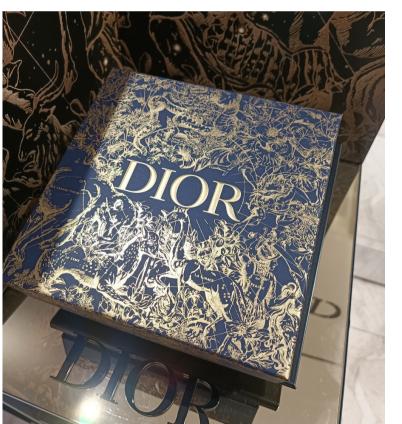




Photo collage 2. Selection of premium cosmetics in walk-in stores (Saara Alanko 2023)







Holography effects are also used in cosmetic packaging. Holograms are often combined with metallic foiling. The variety of colors in premium cosmetic packaging is broad and no specific colors are preferred. Gold is used frequently, and often the packaging of e.g., an anti-age series is foiled all over with gold or silver. Foiling can be particularly popular in anti-age products because it not only catches the eye, but increases the prestige of the product. Anti-age products are often more valuable due to their ingredients and nourishing features, so it is a well justified solution for these types of products. In addition, some packages feature embossing, which makes the surface of the package come alive (Photo collage 3). Embossing is still a very rare effect in the overall picture of cosmetic category. Clearly, the most popular special effect in premium packaging is foiling.

Photo collage 3. Selection of colorful premium cosmetics in walk-in stores (Saara Alanko 2023)

DERMO-COSMETICS

Dermo-cosmetics sold in pharmacies and various beauty clinics differ from natural cosmetics and cosmetic products of premium brands by their generally more clinical appearance. Pharmacy cosmetics, also known as dermo-cosmetics, are thoroughly researched and safe cosmetics that are well tolerated even by more problematic and sensitive skin types (Verkkoapteekit.fi). The light color palette is typical for pharmacy and spa products (Photo collage 4). It represents cleanliness and reliability.

In dermo-cosmetics, the use of special effects is generally more restrained, although obviously there are brand-specific differences, and some brands use foils as special effects. In general, the packaging of dermo-cosmetics is very minimalistic and timeless, hence why trends reflect them less visibly when compared to the product series in other previously mentioned cosmetics categories.









Photo collage 4. Selection of dermo-cosmetics in a pharmacy (Saara Alanko 2023)









Photo collage 5. Selection of everyday cosmetics in walk-in stores (Saara Alanko 2023)

EVERYDAY COSMETICS

Everyday cosmetics are personal care products used regularly to take care of the body and maintain hygiene. Cosmetics aimed for daily use are available in wide range of formulations, colors, and scents to suit all kinds of preferences and skin types. These products are formulated to provide various benefits, such as hydration, coverage, protection, and nourishment, and are used to help people feel more confident and comfortable.

Since this product category is wide and it includes all types of cosmetics, the different kinds of packaging vary (Photo collage 5). Everyday cosmetics may be cheaper than earlier presented product categories (or medium-priced, depending on the product) Special offer packages can be often found from products of this category. Overall, special effects are used narrower in this category. The cost-efficient look is achieved by using a wide range of colors and graphic elements. Foiling can be found especially as highlighting the names of the products or brands.

OVERVIEW & TRENDS

After a specific review, it can be stated that trendy cosmetic packaging is very minimalistic. Minimalistic packaging communicates the brand's sensuality, and clinical feeling that creates a spa-like atmosphere for the consumer. Flashy colors act as eye-catchers and no graphics are necessarily needed for the secondary packaging. The foil also works well with colors, and it emphasizes the design when minimally used.

The placement of the foiling can also be asymmetric and look frantic, but it still brings sophistication and a premium feel to the design. This trend extends to basically all categories introduced earlier. Evidently, there is a lot of variety, but many brands recent packaging designs and other marketing elements in the walk-in stores can be seen participating in the minimalistic trend.

Another growing trend seen in recent years is Asian skincare routines. Western people have shown more interest in Asian skincare market and products. It is possible that in the near future we will see Korean and Japanese inspired visual elements not only in the product ingredients, but also in advertising and packaging.

3.2 ONLINE STORES

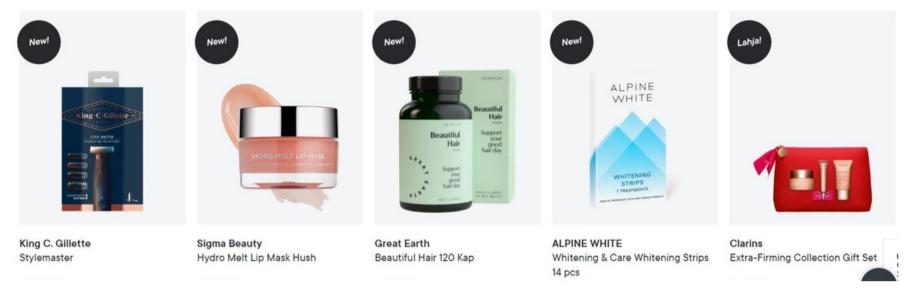


Image 1. Lykos' webpage (Lyko 2022)

In Lyko's online store, products are mainly sold with pictures of their product packaging (Image 1). Multiproduct photos also often show gift boxes in addition to product pictures, as the Image 1 reveals. Sales are boosted e.g., by showing the color and texture of the cosmetic product, which can be demonstrated in the product images in different ways.

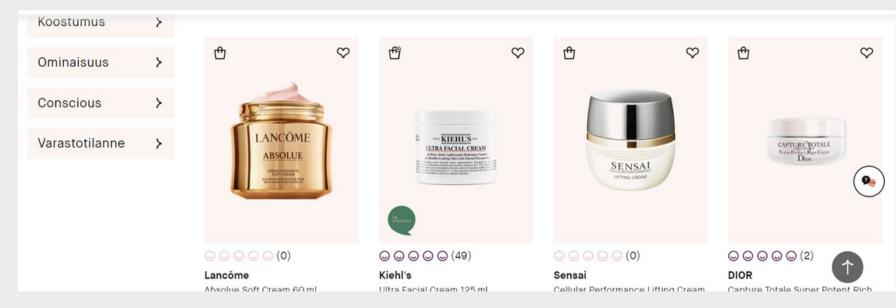
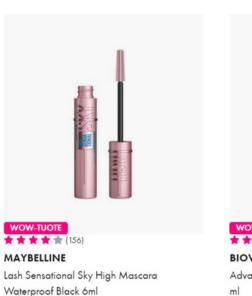
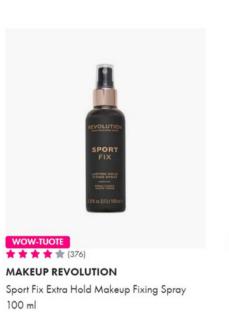


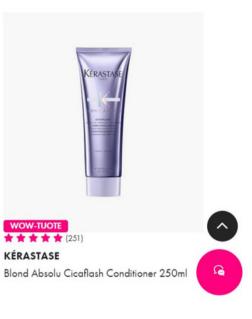
Image 2. Kicks online store (Kicks 2022)

On Kicks' website, products are mostly seen with pictures of the product packaging. A preview of the products is created, for example, by showing an opened jar. Reviews posted by other customers are also easily visible to the customer to make easier choices. (Image 2.)









On the website of Cocopanda, products are again mainly sold with pictures of their product packaging. An image of the products is created, for example, with an opened jar and some eye-catching demonstration of the product. To make choosing easier, product reviews posted by other customers are also easily visible and accessible to the consumer. (Image 3.)

On Sephora's website, products that are sold in gift

packaging are often presented with product images

showing both primary and secondary packaging. For

individually sold items, Sephora follows the general

Image 4 shows that Sephora also adds its own eco-

label to some product pictures.

line by favoring sales photos with product packaging.



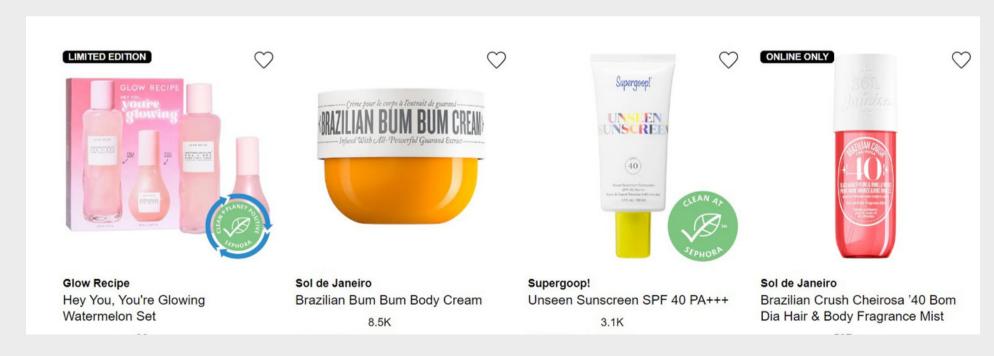


Image 4. Sephora's website (Sephora 2022)



Image 5. Stockmann online store (Stockmann 2022)

Stockmann has emphasized gift packages and completely omitted images of the product packages on their online page (Image 5). With gift packaging, themes, coloring and effects may depend emphatically on the season and target groups.



Image 6. Cocopanda online store (Cocopanda 2022b.)

Cocopanda's website also displays the examples of gift packaging. The picture includes not only the gift packaging, but also the different products the packaging contains. This is a typical way to present gift packaging online. (Image 6)

OVERVIEW & THOUGHTS

From the product benchmark of the online stores, the use of attention attracting color palette in cosmetic packaging is clearly evident. Naturally, a wide range of colors, effects, and shapes also means greater competition for distinctiveness. What surprised the author the most was how well the product pictures stood out when the cosmetic product itself was displayed in some way. Consumers pay for the packaging design and want to see how it looks before buying, especially because online shopping cannot provide for actual product testing before purchasing.

One noteworthy observation emerged, not only in walk-in stores, but also in online stores. Cosmetics are mainly sold with pictures of their primary packaging. There might be multiple reasons, but certainly one is that consumers want to see what the actual product packaging looks like. It is part of the aesthetics of the product itself.

According to professionals, consumers are particular about the packaging and may choose cosmetic products based on aesthetics rather than suitability for their skin type (Lappalainen, 2023b.). This phenomenon is known as everyday aesthetics. It has been researched by Professor Yuriko Saito, who argues that our aesthetic choices can have a significant impact on our quality of life and the world around us (Leddy, 2009).

3.3 PINTEREST MOODBOARDS

"ECOLOGICAL COSMETICS"

Photo collage 6 presents themes of organic colors or completely undyed packaging materials that appear repeatedly in Pinterest search results when using the search term "ecological cosmetics". The search results also included a product line completely without packaging. According to Pinterest, ecological cosmetics are packed in as neutral as possible, or no packaging is used at all. Ecological cosmetics packaging materials appear to be cardboard, wood, or other natural-looking materials. These examples have minimal plastics used. The research results are simple, minimalistic, and natural.















Photo collage 6. Ecological cosmetics (Photo collage: Saara Alanko 2023)

ZOMA POZOMA (C. MARIA LARGE LA













"PREMIUM COSMETICS"

Based on search term results provided by Pinterest, premium cosmetics appear dark and elegant (Photo collage 7). The packaging of premium cosmetics is simple, and foils are used in different ways. In addition to foiling, pre-glazing, and holography can also be seen in use as special effects. Common themes are moderate and neutral packages, yet special effects are popularly used.

In addition to paperboard used in the sales packaging, the premium product packaging materials are, e.g. glass and plastic. The overall impressions from the search results appear valuable, detailed, and sophisticated.

Photo collage 7. Premium cosmetics (Photo collage: Saara Alanko 2023)

"PREMIUM & ECOLOGICAL COSMETICS"

According to Pinterest, Premium & Ecological Cosmetics are a mixture of both categories. Photo collage 8 presents that earthy, muted tones are used in the packaging, but foiling is evidently more commonly used than in sustainable cosmetics alone.

The materials seen in the Photo collage 8 include a range of recycled plastics, glass, cardboard, and wood. By combining these elements, different impressions of the brand can easily be created. The general style of the products is not only trendy and modern, but also fresh and earthy.













Photo collage 8. Premium and ecological cosmetics (Photo collage: Saara Alanko 2023)

OVERVIEW & THOUGHTS

Pinterest is a popular social media platform that often serves as a source of inspiration for many designers and creatives. It is a visual discovery and bookmarking platform that allows users to discover, collect and share ideas and inspiration for their design projects (Pinterest). One of the benefits of using Pinterest as an inspiration platform for designers is that it allows them to easily gather a wide range of design ideas and styles in one place. They can save and organize these ideas on their boards and easily refer to them when inspiration for specific projects is needed.

The previously presented Pinterest benchmark provides a great overview of the product themes researched in this study, and makes it easier to understand the pointed dimensions of the themes "ecologicality" and "premiumity". It is easy to identify the main stereotypes of these concepts by reviewing the photos collected from the search results.

3.4 KEY DRIVERS ON COSMETIC MARKET

The cosmetic industry in Europe (especially in Finland) is a highly competitive and dynamic market, characterized by at least the following features the author has identified:

- Regulation: The cosmetic industry in Europe introduces and maintains strict regulations and directives aimed at protecting consumers by ensuring product safety, such as the EU Cosmetics Regulation and e.g., Finland's local laws and regulations.
- High standards: Consumers have high expectations for the quality and performance of cosmetics. Companies must meet these standards to succeed in the growing market.
- Diversity: There is a wide range of cosmetic brands in Europe, including global international brands and smaller local brands.

- Innovation: Cosmetic companies create innovative products, utilizing advanced research and development processes and a wide range of experimental materials.
- Sustainability: Sustainability is increasingly valued among European consumers, and cosmetic companies are responding by incorporating sustainable materials and practices into their products and packaging.
- Growing market: Despite economic challenges in past years, the cosmetic market in Europe is growing, driven by consumer demand for premium and high-performance products.

04

SPECIAL EFFECTS

4.1 PAPERBOARD AS SURFACE FOR SPECIAL EFFECTS

Paperboard packaging is the most common type of sales packaging of cosmetic products. The paperboard box provides the consumer with important information about the product, as well as protects the primary product packaging. A well-designed paperboard packaging adds value to the product and is an integral part of its marketing. (Järvinen 2021a., 79.)

It is easy to distinguish paperboard from thinner paper. Its properties are clearly thicker and more durable. Paperboard is typically made of three layers of fibers, whereby the desired properties are obtained by optimizing the fiber layers in the manufacturing process. Paperboard types can be divided based on raw material as follows:

- 1. Paperboards manufactured by using chemical pulp made from fresh wood fibers
- 2. Paperboards manufactured by using recycled pulp

Familiarity might have an impact on the shelf distinctiveness of products. For example, the type of special effects used in the packaging and the way the chosen effects resonate with the consumer can make a huge difference in selling the product. It is possible to add effects to the surface of the package depending on the technology used at some point in the manufacturing process, but often the addition of effects constitutes its own process. (Järvinen 2021b., 80.)

The special effects to be sampled in the research were defined in cooperation with Metsä Board and packaging research company Sense N Insight. Six special effects were chosen for the study: embossing, minimal foiling, minimal foiling + embossing, softtouch lamination + embossing, offset printing, and holographic foiling + embossing. The effects were manufactured with different techniques on similar-sized, square-shaped packaging mock-ups and presented to the participants of the research during the survey. The following introduction gives a brief overview of the different effects and their manufacturing processes. Some effects are more commonly used than others.

4.2 INTRODUCTION OF THE SPECIAL EFFECTS

1, EMBOSSING

Embossing is a printing technique that involves creating raised designs on a surface. The process begins by creating special plates, known as female and male dies, that match the design of the embossed area. The material to be embossed is placed between the plates that are then pressed together under high pressure and heat. This results in an area of the material that is raised and features the design of the embossing plate.

Debossing is a similar technique, but it creates an indentation instead of a raised area. Both embossing and debossing can add a sophisticated and high-end look to the product. (Andersen S. 2020). Both techniques can be applied to the same surface to achieve a multidimensional effect.



Image 7. Mock-up with embossing



Image 8. Mock-up with embossing (close up)

2. HOLOGRAPHIC FOILING+EMBOSSING

Foiling is a special effect technique that involves applying a thin layer of foil to a surface. This is typically achieved with a process called hot foil stamping, which involves using heat, pressure, and a metal die to transfer the foil onto the surface. Holographic foiling adds value and makes the surface of the packaging more lively. Embossing highlights the effect.

Holographic foil is manufactured similarly to metallic foils but includes an embossed pattern that diffracts light. Holographic foil shows the colors of the spectrum at different angles, depending on lightning. Numerous different patterns and color variations are available within the holographic hot stamping foil range. (Foilco.)



Image 9. Mock-up with embossing and holorpahic foiling



Image 10. Mock-up with embossing and holorpahic foiling (close up)

3. SOFT-TOUCH LAMINATING+EMBOSSING

Soft-touch lamination offers a protective finish with a soft velvet-like texture. The soft-touch finish is matt. This lamination technique makes the surface durable and (is) resistant to, for example, fingerprints. Printed cardboard is soft-touch coated with a special plastic laminate film. This method of lamination creates a moisture barrier and protects the surface from, e.g., formation of scratches. (Pinkney.) Embossing adds texture to the effect.

Lamination tend to be a more expensive finishing option compared to many others, as this application requires additional processes (Iverson, 2022).



Image 11. Mock-up with embossing and soft-touch laminating



Image 12. Mock-up with embossing and soft-touch laminating (close up)

4. MINIMAL FOILING

Foiling is a special effect technique that involves applying a thin layer of foil to a surface. This is typically achieved with a process called hot foil stamping, which involves using heat, pressure, and a metal die to transfer the foil onto the surface. The foil is available in a wide range of colors and finishes- such as metallic, matt, glossy, and holographic.

Foiling is often used for creating high-end packaging, invitations, and other items that require a premium look. Foiling can also be used in conjunction with other printing techniques, to create unique and striking designs. (Fussell 2021.) Minimal foiling saves on the amount of foil material and creates elegant and timeless eye-catching designs.



Image 13. Mock-up with minimal foiling



Image 14. Mock-up with minimal foiling (close up)

5. OFFSET PRINTING

Offset printing is a printing method where ink is transferred from a plate to a rubber blanket before application to the printing surface. This process allows for high-volume, high-quality printing and is therefore commonly used for printing. The main advantage of offset printing is that it allows for precise control of ink laydown and results in sharpness and clearness. Additionally, the plates used in offset printing can last long, making it a potential option for high-volume printing projects. (Blandino 2018.)



Image 15. Mock-up with offset printing

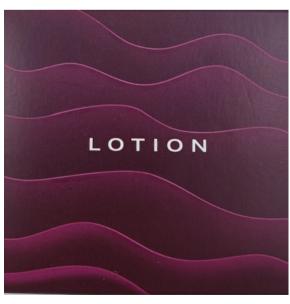


Image 16. Mock-up with offset printing (close up)

6. MINIMAL FOILING & EMBOSSING

This technique combines both (application of) foiling on the surface of the packaging and embossing and debossing of the material. This technique with two special effects needs two processes to be implemented, but the result also features two eye-catching special effects that add value to the packaging and help the brand to stand out on the shelves. When used together, foiling and embossing can create a multi-dimensional and textured look that can add a premium feel to any printed material. Using a minimal amount of foiling makes the design appear sophisticated and elegant.



Image 17. Mock-up with minimal foiling and embossing



Image 18. Mock-up with minimal foiling and embossing (close up)

4.3 PACKAGING MOCK-UPS

Six mock-ups were used in the study, the design of which was carried out by Metsä Board's Harju. Each mock-up is the same size and shape. Only the effect differs. The mock-ups were assembled at the Sense N Insight office, where the packaging research was also carried out.

In addition, letter codes were added to the mock-ups with stickers that corresponded to the letters presented in the questionnaire. This made it easier for the participants to answer the survey when the packages were named. There were plenty of mock-ups and they were checked after each respondent. If fingerprints or other marks were visible on the packages, they were replaced with new ones. The mock-up packages were presented empty in the research situation.



Image 19. Samples of the mock-ups

OVERVIEW

Familiarity might have an impact on the shelf-distinctiveness of products. For example, the type of special effects used in the packaging and the way the chosen effects resonate with the consumer can make a huge difference in selling the product. It is possible to add effects to the surface of the package depending on the technology used at some point in the manufacturing process, but often the addition of effects constitutes its own process. (Järvinen 2021, 87.)

Special effects on packaging can help products to stand out when displayed on store shelves and online in product pictures. Each of the special effect techniques presented above can be used to create unique and engaging designs that stand out. By combining multiple techniques or using them in creative ways, designers can create truly memorable and impactful products. This study does not address the actual sustainability nor ecologicality of each special effect, as it is almost impossible to consider every step of every manufacturing process or correctly calculate their carbon footprints.

05

CONSUMER RESEARCH

5.1 CONSUMER RESEARCH AS A METHOD

Consumer behavior is a process by which a group or an individual can select, buy, use, or dispose of products, services, or experiences to satisfy their desires or needs (Lingkan et al. 718). Consumer study is a research method that aims to understand the preferences and attitudes of consumers toward a particular product, service, or brand. Collecting data from consumers through various research techniques is used, such as surveys, interviews, eye-tracking, focus groups and observation. Consumer research provides important information to product manufacturers and designers about the consumer interface. This method is particularly well suited to research where the aim is to find out consumer preferences and attitudes towards various special effects used in cosmetic packaging. The research provides valuable information for packaging design processes in the future.

Topyan and Bulut (2008) justify the implementation of their cosmetic packaging research as a consumer study based on the evaluability of aesthetic properties and the cosmetics product category together. Cosmetics is a product category that is mainly oriented to evoke aesthetic feelings in consumers. Cosmetics packaging design can be considered to affect consumer behavior

more in the area of purchasing choices, since the visual features of products are part of their aesthetics. Aesthetic qualities are subjective, and can therefore be identified by observation. It seems that cosmetics are more susceptible to evaluation, as consumer perceptions can be said to be more critical when evaluating products in this category.

This rationale about aesthetics can also be applied comprehensively when studying special effects in cosmetic packaging, since the effects play an essential role particularly in cosmetic packaging visuals. Different effects cause the biggest variations between the packaging designs. The only variable incorporated in the mock-ups of this study is the special effects.

This research is based on sensory evaluation, and it focuses on the visual and tactile senses. The methods used in the consumer survey are ranking, pair-wise comparison, and multiple-choice questions. The survey also provided open-ended questions, allowing responses which can be used to support the end results and verbalize the participants' perceptions. The study form can be found from Appendix 2 (in Finnish).

5.2 SENSORY EVALUATION

Kemp et al. (2009. 16-17) define sensory evaluation as referring to a scientific approach that involves eliciting, measuring, analyzing, and interpreting the responses produced by all senses to evaluate products.

Sensory evaluation can be categorized into objective and subjective testing. Objective testing involves trained individuals assessing sensory qualities, while subjective testing involves measuring consumer reactions. Combining these approaches provides valuable insight into how sensory properties affect consumer acceptance and emotional benefits. Products can be designed to deliver optimal benefits by linking sensory properties to physical, chemical, formulation, and process variables. To conduct effective sensory testing, it is essential to have a well-defined set of goals, a robust experimental plan and design, to use appropriate statistical methods, to follow ethical principles, and to deliver insights that can be applied to inform decisions.

By conducting consumer research, subjective reactions to the special effects can be determined. This research focuses on the visual and tactile senses. It can be assumed that perceptions of products can change when first only being able to visually evaluate the products and then touching and feeling them later. On the other hand, it is also a valuable result if perception doesn't change during the sensory evaluation. This is why the survey will be conducted in two phases. In the first phase, the participants evaluate the products based only on the sense of sight. In the second phase, the participants will be given permission to touch the products. The questions are arranged in an order which allows to discover the changed perceptions when analyzing the research data. The following methods were all performed during the sensory evaluation.

5.2.1 RANKING

In consumer studies, the ranking method is an approach used to define consumer preferences toward a particular product or brand. This method involves presenting a list of items to the respondents and asking them to rank the items according to a named particular attribute, such as preference, importance, or effectiveness.

When consumers make their daily purchasing decisions, they must select a brand or attribute every time they choose a product. The ranking approach provides a means of exploring this process explicitly and repeatedly. Respondents must scrutinize the products and their features and select the best option. (VisionEdge Marketing.) The ranking method is useful as it allows researchers to obtain a clear picture of consumers' priorities and preferences. Ranking is a simple and efficient way to collect data, and the results can be analyzed easily when the questions are asked in the right way. However, the ranking method has some limitations, such as potential for bias, particularly if the list of items presented to the respondents is not comprehensive. Therefore, it is essential to design the study carefully to minimize bias and ensure that the results reflect accurately the consumers' preferences and attitudes.

In this study, the ranking method was used to find out consumers' perceptions on how ecological and premium they perceive the different special effects. The goal throughout preparing the study was to minimize the margin of error by ensuring that the packages featured in the study are similar. Since the aim of the research was to specifically research the special effects, it was important to focus on keeping the special effects as the only variable between the packages.

5.2.2 MULTIPLE-CHOICE QUESTION

In a multiple-choice question, the respondent can choose one or several of the given options. It is up to the creator of the survey to define how many options the respondent will be given when assembling the research. Multiple-choice questions are an essential part of creating a survey. On SurveyMonkey's web page, it is described that the multiple-choice questions are versatile and intuitive, and they produce information that can be easily analyzed. Because they provide certain pre-set response options, they provide structured responses and make answering the survey easier for respondents. (SurveyMonkey.)

Multiple-choice questions were used in this study to elicit consumer perceptions from different perspectives. Participants were asked e.g., to choose the most ecological, most premium, and most attractive products. In the first step, the participants were asked to justify their answers with an assessment based only on the sense of sight. In the next step, consumers gave their evaluations to similar multiple-choice questions when they have also been given permission to touch the packaging mock-ups. This system makes it possible to find out changes in consumers' perspectives when another sense is also involved. In addition, at this stage, the sense of hearing may also be engaged to a small extent, as the packages may make different sounds when consumers are permitted to touch them, depending on the special effect used.

5.2.3 PAIR-WISE COMPARISON

In a pairwise comparison, the purpose is to determine and compare the magnitude, superiority, or some similar logical order for several factors. The respondents are presented with only two factors to compare at the same time, and asked to choose one as their answer based on the question presented. A sufficient number of pairs are formed and presented to the respondents to ensure that each factor is once compared with another.

Pairwise comparison, as the name suggests, requires the respondent to compare only two things at the same time. The result is a logical order between the compared factors for each individual respondent. Compared to many other methods, it is therefore easier for respondents in such problematic situations and consequently the research result becomes more reliable. The method considers the totality of the respondent's opinion and constructs the answer by examining the relationships between the compared factors, without focusing only on the most popular choice. When implemented with a questionnaire, the weakness of the method is that the respondents can look at their own answers afterwards, reassess their logic in relation to each comparison pair and change their answers. On the other hand, this can be considered beneficial, because the respondents are able to reassess their thoughts and the relationships of the answers to each other. In many cases, six factors is the maximum meaningful number to include for comparison in a study. (Valli R. 2015a., 1041-143)

In this research, the participants were asked to choose their overall favorite by using pairwise comparison. They were asked to compare each packaging to each other (15 comparison pairs in total) and choose their favorite from every pair.

5.3 PREPARATIONS

Preparations for the research started in practice as soon as the thesis project officially started. At the end of 2022, Metsä Board's Harju presented the packaging designs. Together with Harju and Korhonen, the appearances and sizes of the packages were reviewed so that they would match each other as closely as possible in the study. The goal was that the products would each feature only one variable: the special effect. This ensures the quality of the research and minimizes errors, as well as facilitates product evaluation for the consumers participating in the research. The packaging samples were ordered in mid-January 2023, when the special effects were officially decided and designed. At this stage, it was possible to learn more about the selected effects and their manufacturing techniques (presented in Chapter 4).

Since the beginning of February 2023, the author worked on the survey together with Korhonen. After a review of different alternatives, it was decided to use a printable questionnaire, from which the collected data is manually transferred to the computer after the research. The benefit of the printable form is that if necessary, the participants could return and change previous answers easier.

If any problems were to appear in an online questionnaire, they might have remained completely unnoticed by the author, thus negatively affecting the reliability of the research results. The problem with paper questionnaires is, of course, that there is a risk of data distortion during their computerization. Special attention was paid to this, and the transferred data was double-checked.

In survey preparation, extensive background work and time for familiarization with implementing research was required, because the author's educational background did not directly support the organization of the research. Korhonen supervised the drafting of the survey and ensured that all research questions were included in the survey in one way or another, in order to elicit clear and consistent data for use. Since the basis of good and reliable research is a successfully and accurately prepared survey, this process took a lot of time and effort. With Korhonen's help, a coherent and clear survey was gradually constructed. Investing in the planning of the survey at this stage ensured that reliable answers to the research questions could be elicited and the outcome is a valid compilation of justified methods.

5.4 IMPLEMENTATION

The study took place on March 16-17, 2023, at the Sense N Insight research space on the third floor of the Myyrmanni shopping center in Vantaa, Finland. The research room was furnished with three tables and chairs that were arranged in pairs to allow natural light to enter the room through the window behind the participants, thus also illuminating the research table and cosmetic packaging samples. Prior to the study, each participant received a pen and a numbered questionnaire (Appendix 2) containing questions to determine their suitability for the study. To qualify for participation, consumers had to purchase cosmetics at least once a month and use face cream daily or almost daily. The study was limited to legal-age participants. Each survey was conducted under controlled conditions to maintain the overall quality of the research, and participants were given the opportunity to seek clarification on any potential ambiguities.

Participants were recruited via local Facebook groups and the Jodel application, and rewarded for their participation with a €10 gift card to a K-Group store. A total of 50 consumer tests were conducted over two days, along with backup tests in case some questionnaire needed to be excluded. Each study session included

1–3 participants. Prior to each session, the author provided an introduction (Appendix 1) to the consumers, explaining explaining the study's purpose and process, and granting permission to begin. Participants were informed that the first round of assessment was based solely on visual evaluation and that they would be able to touch the packages during the second evaluation round, with permission granted on the questionnaire. The average time taken to fill out the questionnaire was 15 minutes per participant, with a total of 21 questions aimed at answering four predefined research questions. The research questions were:

- 1. How do special effects affect consumers' perceptions of cosmetic products' attractiveness, ecologicality, premiumity and willingness-to-pay?
- 2. How do consumers' observations based on visual and tactile senses affect their opinions about products? Do their opinions change during the sensory evaluation?
- 3. How do special effects affect consumer preferences?
- 4. Which elements of the effects communicate attractiveness, ecology and premiumity?

The research was planned to proceed in an order that was as logical as possible. The goal was to maintain participants' interest throughout the entire study. It was also important to keep to the maximum time (20 minutes), because respondents get tired from overly long surveys and consequently the quality of the answers suffers. In this study, the first part included an introduction read by the author, which prepared the participants for filling out the questionnaire and for the topic in general. According to Valli, the so-called warm-up questions that introduce the topic should be placed at the beginning of the survey. More challenging questions can be asked in the second stage, and slightly easier ones towards the end. (Valli 2015b., 104.)

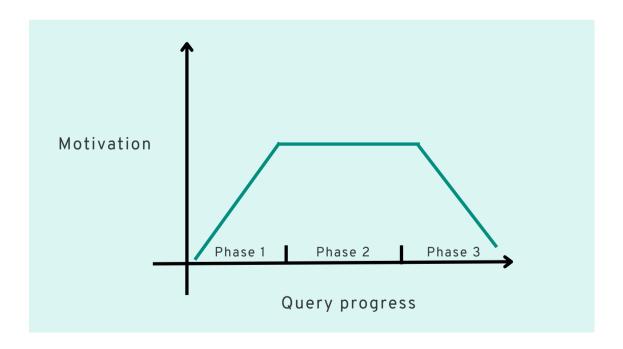


Figure 4. The amount of the respondent's motivation during the survey (Valli 2015c., 105)

The research underwent a pilot testing phase with a sample group consisting of seven people. During the test phase, observations were made and interviews were conducted to assess the effectiveness of the questionnaire. Based on the feedback received, the questionnaire was modified and supplemented to ensure that it effectively addressed the research questions and was logical and comprehensible for participants.

The survey forms were otherwise identical, but to enhance the research quality, 25 questionnaires were presented with packages arranged in a different order. This approach was taken to vary the answers and avoid any potential influence bias on the research results based on the order of the packages. The packaging mock-ups were labeled with the letters "P", "N", "U", "S", "E" and "H". Lettering the mock-ups made it easier to perform the survey and interpret the results of the study. Letters are deliberately not applied in order from the beginning of the alphabet, as this could cause unintentional inequality to the packaging samples. For more detailed information, the survey form can be found in the attachments.

After conducting the research, the data was transferred to a SPSS program in which the data was analyzed and the comparison of sensory evaluation could be made. Data visualization and compiling executive summary report followed later on.

5.5 RESULTS

In this chapter, the results of the consumer survey are presented and analyzed. First, information describing the sample is presented. This is an essential part of the interpretation of the results. Next, the main findings of the research are presented and analyzed, and research questions are answered. Official and more detailed executive summary of the research can be found from the Appendix (Appendix 3). Some thoughts on how research information can be used in design processes are presented after and finally, further research possibilities are considered and discussed.

The study is divided into two rounds based on two different types of sensory evaluation. In practice, this means that the same questions were asked and answered twice, first based on visual assessment in the first round, and again based on visual and tactile evaluation in the second round. In the result tables, the lighter bar on the left always shows the result of the first evaluation round, and the darker bar on the right the result of the second evaluation round. The rounds are compared with each other to gain an understanding of the influence of senses on participants' opinions of the effects.

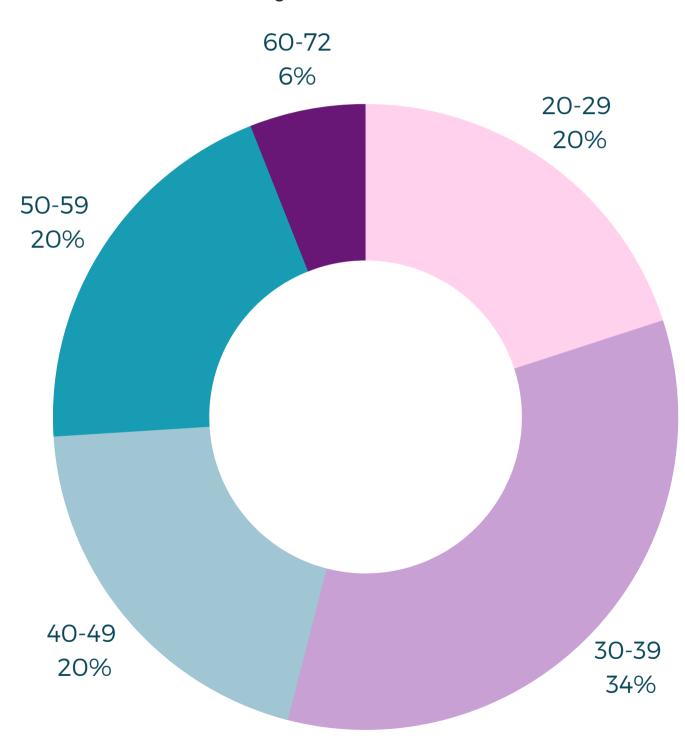




GENDER **DISTRIBUTION** N=50

Most of the participants were female.

Table 1. Visualization of age ditribution



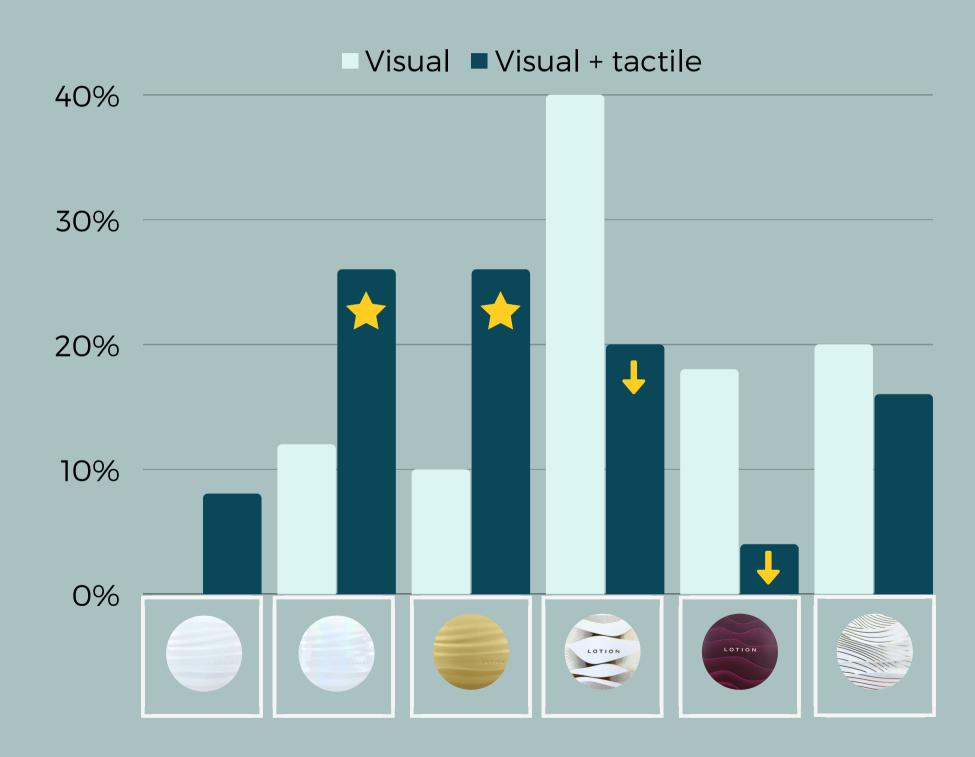
AGE DISTRIBUTION N=50

The participants age ditribution varied between 20 to 72 years.

Attractiveness was the characteristic that varied the most in the sensory evaluation. Double-effected (embossed + coated) packages increased their value the most when participants were allowed to touch the packages. The most visually attractive packages featured a mixture of white and golden details. Minimal foiling decreased in value the most, and again double-effected packaging with minimal foiling and embossing experienced only a small drop in the second evaluation round. Overall, embossing, gold, and glossiness can be named the most attractive effects.

"NAME THE MOST ATTRACTIVE"

Table 2. Visualization of naming the most attractive special effect



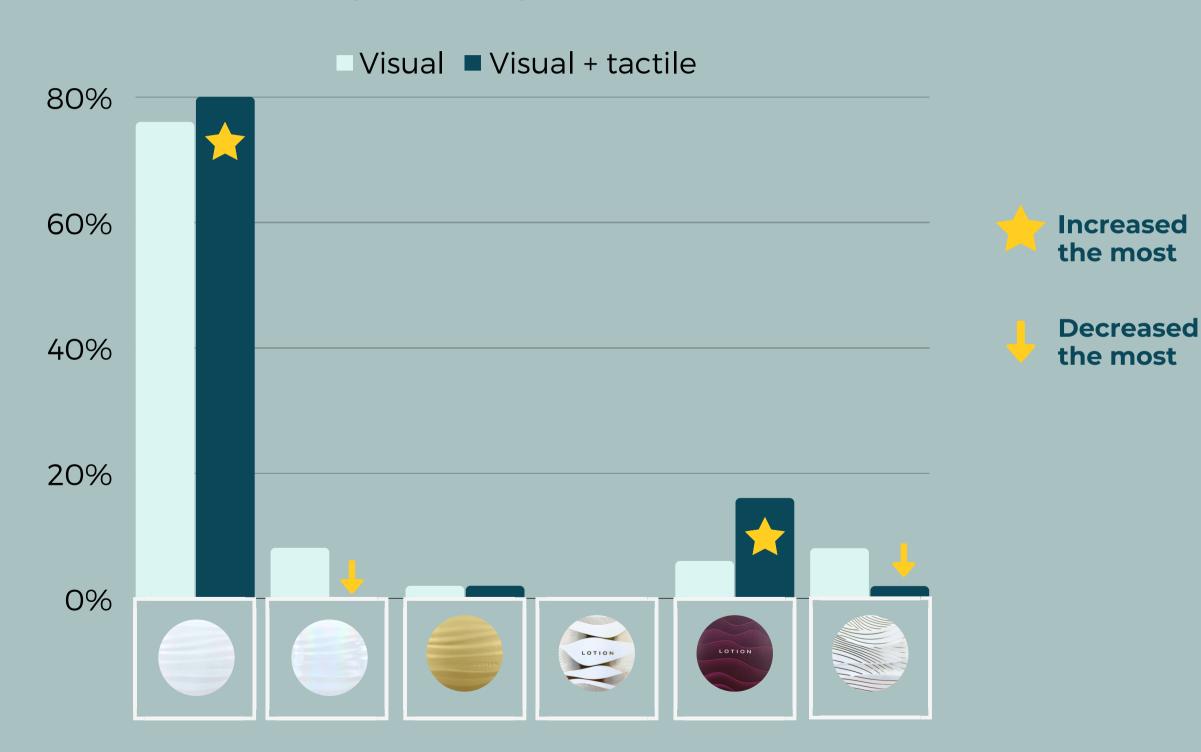




The participants were the most unanimous about ecologicality. The simplest white packaging with only embossing as an effect was thought to be the most ecological. The patterning reminded consumers of nature. In addition to the embossed packaging, the offset-printed packaging decreased in value in the sensory evaluation. The packaging was described as lightweight and feeling like cardboard.

"NAME THE MOST ECOLOGICAL"

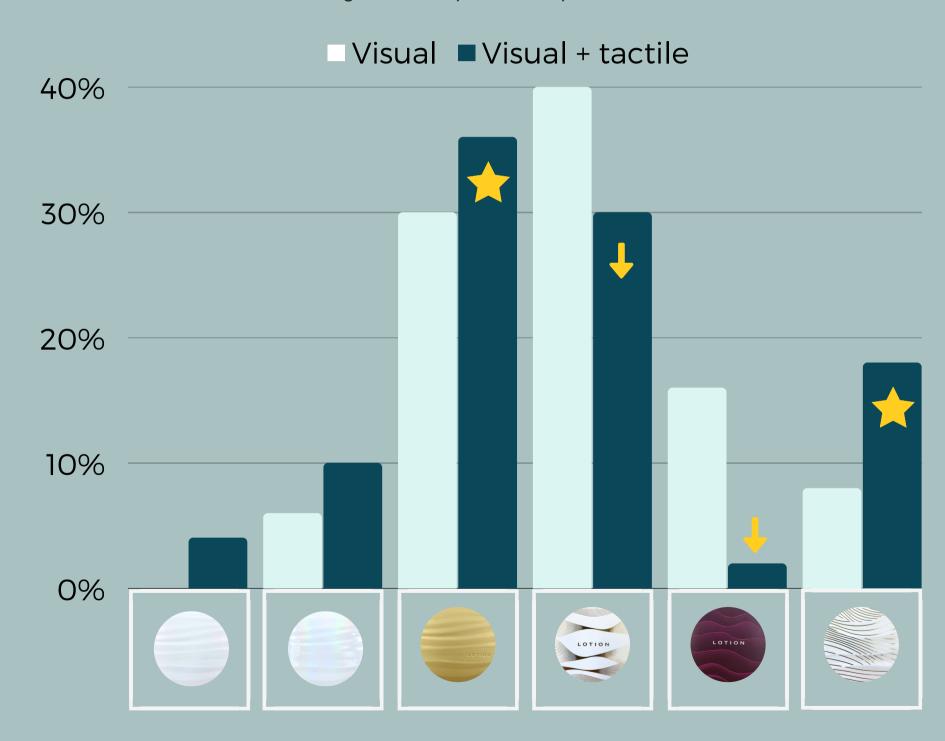
Table 3. Visualization of naming the most ecological special effect



The participants preferred the most the premium packaging that was coated with a golden soft-touch laminate. Other embossed packages also improved their position in the second evaluation round, when the packages could be touched. Non-embossed packages lost their premiumity the most in the second round.

"NAME THE MOST PREMIUM"

Table 4. Visualization of naming the most premium special effect





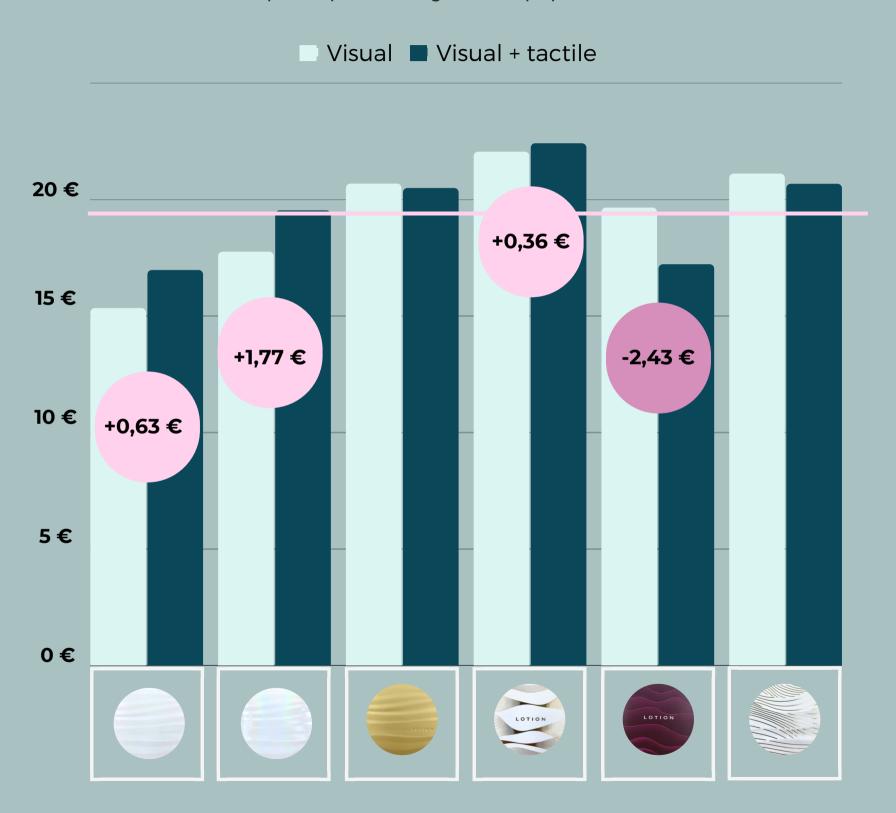


Willingness-to-pay increased the most for the embossed and hologram foiled packaging. The second highest increase in willingness-to-pay occurred for embossed packaging which was considered the most ecological. Willingness-to-pay for the minimal(ist) foil experienced the third highest increase, and at the same time, it also had the highest willingness-to-pay of all packages. Willingness to pay dropped the most for offset printed packaging.

The average price of a similar cosmetic product was defined as 19 euros (marked with pink line).

"HOW MUCH WOULD YOU PAY?"

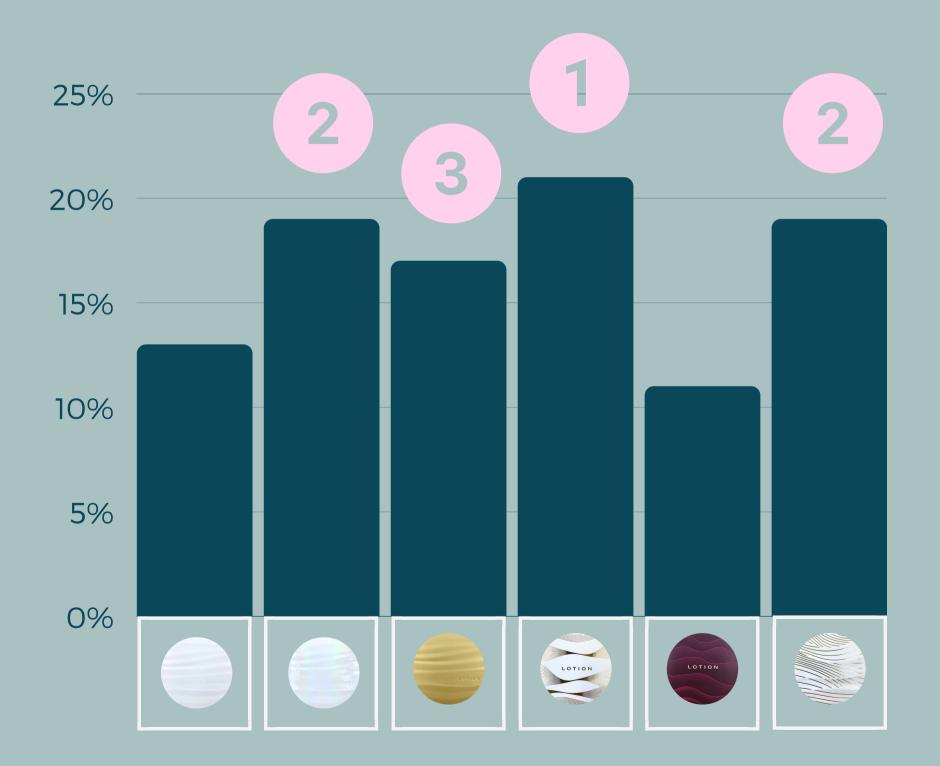
Table 5. Visualization of participants willigness-to-pay



The ranking was made by comparing each packaging once with every other packaging (pairwise comparison). The evaluation is based on both visual and tactile assessments. The minimal foiling was ranked as the overall favorite. The second place in the ranking was tied between two doubleeffected packaging: embossing + minimal(istic) foiling and embossing + holographic foiling. Embossed + soft touch laminated packaging placed third.

"WHAT IS YOUR FAVORITE?"

Table 6. Visualization of naming the overall favorite



06 CONCLUSIONS

6.1 ANSWERS TO THE RESEARCH QUESTIONS

1. HOW DO SPECIAL EFFECTS AFFECT CONSUMER PERCEPTIONS OF THE ATTRACTIVENESS, ECOLOGICALITY, PREMIUMITY AND WILLINGNESS-TO-PAY OF COSMETIC PRODUCTS?

The choice of presenting special effects in cosmetics packaging has a great impact on consumers' perception on the attractiveness, ecologicality, premiumity and willingness-to-pay. The effects communicate different things to consumers: attractive packaging has gold, embossing, and shine; ecological packaging is restrained and uses a design language reminiscent of nature, whereas gold, shine, and three-dimensionality are seen as premium effects. Premiumity and attractiveness can be seen increasing consumer willingness-to-pay especially with embossing and glossy effects .

2. HOW DO CONSUMERS' OBSERVATIONS BASED ON VISUAL AND TACTILE SENSES AFFECT THEIR OPINIONS ON PRODUCTS? DO THEIR OPINIONS CHANGE DURING THE SENSORY EVALUATION?

Consumers' opinions experienced even radical changes during sensory evaluation. A sophisticated and shiny combination of gold and white is considered visually attractive. When it comes to touching the packaging, the double effect was clearly considered the most attractive: soft-touch lamination combined with embossing or hologram foil was described as the highest quality and most attractive. The ecological packaging was very unanimously described as the plainest, and it was hardly affected during sensory evaluation. Premiumity was determined in the sensory evaluation in the same way as attractiveness, i.e., embossing increased the premiumity of the packages in the second round of evaluation.

3.HOW DO SPECIAL EFFECTS AFFECT CONSUMER PREFERENCES?

Consumer preferences were particularly influenced by the feel of the special effects. When the participants were able to touch the packaging in the second round of evaluation, the embossed packaging stood out from the others and was ranked higher. Consumers are clearly willing to change their opinion when the added value brought by the effects to the packaging is detected when touching the packaging. Other special effects that stimulate both the visual and tactile senses as they for example, create a shine, look different in different lighting or have a matt surface, also affect the opinions of consumers.

4.WHICH ELEMENTS OF THE EFFECTS COMMUNICATE ATTRACTIVENESS, ECOLOGICALITY AND PREMIUMITY?

For the consumers who participated in the study, attractiveness is described e.g., by elements such as simplicity, shine, golden color, and quality of texture. Ecology for consumers is characterized by e.g., restrained and reduced design, matt surface, cardboard, and a surface that conforms to nature. Packaging that has a pleasant feel, elegant, golden and minimalistic design communicates premiumity. More detailed comments and word clouds collected from the open question answers are presented in the executive summary report (Appendix 3).

6.2 CONCLUSIONS

- Attractiveness varied the most and double effect increased attractiveness
- The most premium packaging had golden and embossed details
- The most ecological packaging stood out most clearly
- Over-all favorites were most premium & most attractive

According to the results of the study, minimal foiling was initially ranked as the most attractive based on visual assessment, but its attractiveness decreased by 50% when participants were allowed to touch the products. Since this question was the first of all, it can be said that minimal foiling is the first of the six effects to catch the eye on the shelf. Holographic foiling and golden soft-touch lamination increased their attractiveness during tactile evaluation. Packages with embossing were determined as the most attractive when participants were allowed to touch the packages. The golden soft-touch laminated and embossed packaging was described to feel pleasant and valuable, and the holographic foiling was thought to be beautiful and glossy. Both packages increased their attractiveness when seen more closely in different lighting. The double effect increased the attractiveness of the packaging. Participants repeatedly described embossed packaging as threedimensional, which seemingly improved the attractiveness of the packaging experienced during tactile evaluation.

In the sensory evaluation, the packaging ranked as the most ecological was the simplest with only embossing as a special effect. Participants found the white paperboard clean-looking and associated it with recyclability. The embossing was said to look and feel natural, and resemble trees or waves. In the second part of the

evaluation, 80% preferred the embossed packaging as the most ecological, and the clean and plain design improved its scores. The holographic foil design decreased in value the most in the category of ecology. This occurred probably because not all participants noticed the hologram foil, therefore mistakenly thinking that the embossed-only packaging and the embossed and hologram foiled packaging were the same in the first round. The offset-printed purple package raised its ecological image the most, with its lighter structure, surprising feel, and wavy pattern reminding participants of a natural and ecological surface.

The packaging ranked as the most premium had golden and embossed details, and gold mixed with white. These were the elements that made the packages stand out from the rest. The packages that were preferred as premium used two special effects, and the vivid, three-dimensional surface of the packaging was perceived as the most premium. Minimal foiling was seen as three-dimensional even though it had no embossed surface. The golden soft-touch laminated packaging was selected as the most premium in the sensory evaluation, and the minimal foiling was rated the most premium and chosen as the favorite package. Participants preferred the embossed and minimal foiling in the second round of the sensory evaluation. The golden pattern of the minimal foiling was praised as well.

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Willingness-to-pay increased for three packages. The hologram foiled packaging clearly raised its price point the most in the sensory evaluation (+1,77 EUR). The embossed packaging, which was considered the most ecological, and the minimal foil, which was chosen as the overall favorite, also increased their price points. The biggest decrease was seen for the offset-printed packaging. It did not fare very well in the comparison anyway, except for the ecological category, where the effect saw a slight increase in the second evaluation round.

KEY TAKEAWAYS

The observations presented above are particularly relevant to cosmetic products that are sold in physical stores since the study was conducted with physical mock-ups and when giving the reviews the participants had the possibility to look at packages from different angles and physically feel the effects. However, it is important to note that some cosmetic products are not displayed in their sales packaging either online or on store shelves, but directly in their product packaging, such as jars. Even if the sales packaging is not always visible in a sales situation, it plays a crucial

role for the success of the product and its properly designed appearance can increase the value of the product in the eyes of the target group. Packaging is an essential component of a product's aesthetics. It creates an impression of its contents for the consumer and contributes to the unboxing experience.

Sensory evaluation is a reliable method for determining how packaging attracts consumer attention. Based on the benchmark conducted in the current market situation, it can be concluded that special effects are not commonly used in the packaging of cosmetic products. For example, the use of embossing is an effective way to distinguish a product from its competitors and attract customers to choose it. Although shiny and golden colors quickly catch the eye, the use of embossing can increase a package's value, as it motivates consumers to touch and inspect the packaging in greater detail. The texture of the embossing effect enhances the appeal of the packaging.

Although consumers want to prioritize eco-friendliness when making purchasing decisions, they nevertheless appreciate premiumity, luxury, and aesthetics when choosing cosmetic products. It is crucial that the product packaging can convey both aspects while also being unique and attractive compared to competitors.

SUMMARY AND DISCUSSION

7.1 IMPLICATIONS

ATTRACTIVE EFFECTS FIT FOR FLAGSHIP PRODUCTS

Combining minimal foiling and embossing on product packaging was the most visually appealing option to consumers. Brands can use these effects to make their products stand out on store shelves and displays. The feel of the effect also has a significant impact on attractiveness, and packages with double effects on their surface were found to be the most attractive. Surprising and tactile packaging can improve the perceived attractiveness of products, making them a great choice for flagship products or anti-aging series.

PLAIN EMBOSSING APPLIES TO NATURAL COSMETICS

In the study's evaluation of ecological packaging, no significant changes were found in the sensory evaluation. The white embossed packaging was deemed the most ecological in both rounds of evaluation, although the plain white packaging was generally well-liked. However, participants had issues with the

poor readability of the text, which may have impacted the overall attractiveness of the packaging. To address this issue, combining wavy embossing with natural color offset printing could improve the readability of text and increase the package's ranking in other categories as well. In a store environment, embossing may be more noticeable in a better light, emphasizing the front of the packaging. Therefore, embossing could be utilized by e.g., dermocosmetic brands, as well as moisturizing, creamy textured nofragrance cosmetics, or natural cosmetics.

PREMIUM ANTI-AGE SERIES SHOULD BE GOLDEN AND EMBOSSED

Clear features were prevalent in premium packaging, and they were consistently noticed and evaluated. Gold, shine, and embossing, as well as three-dimensionality, whether achieved physically or through graphics, defined the premium category. Furthermore, packages that succeeded in the premium category

were also ranked highly in attractiveness and the overall favorite category. This highlights consumers' preference for premium-looking products in the cosmetics category and emphasizes the importance of messaging about premiumity in the packaging design. Golden designs are particularly fitting for premium and luxury brands, antiaging series, and gift packaging.

DOUBLE EFFECTS COULD CREATE A MIXTURE OF TWO CATEGORIES

A combination of foiling and embossing techniques could be utilized to achieve an ecological and premium design. By integrating clean and simple ecological design elements with the golden details commonly used in premium packaging, such as emphasizing only the text while leaving out other graphic elements, it is possible to create packaging that effectively communicates both ecological and premium attributes to consumers. This approach could be particularly beneficial for brands looking to position themselves as environmentally conscious while maintaining a premium image. Ultimately, this approach has the potential to enhance the perceived value and appeal of cosmetic products, particularly for consumers seeking high quality and environmentally responsible options. This kind of packaging could suit many premium natural cosmetics and ecological premium brands.

7.2 LIMITATIONS

The test group, consisting of only 50 participants, is relatively small, which limits its reliability compared to larger studies. Additionally, the recruitment process resulted in a lower than targeted percentage of male participants – only 10%, when the desired target was 30%. Furthermore, the study was limited to physical mock-ups and therefore can't be applied to online environment.

The paper-based data collection method was effective for a study of this size, although data transfer to a computer posed a risk of data distortion. Random checks were performed to ensure the accuracy of the transferred data. The use of electronic pads as an alternative data collection method was considered, but the potential for data loss or distortion made it less desirable (preferable). Such problems could have had a significant impact on the research results. If the study had been organized in the originally planned schedule (at the end of January 2023), there

would have been more time for processing and visualization of research data, and formation of final conclusions. The delay in the implementation of the study was mostly caused by the late delivery of mock-ups, which took longer than expected to complete. The transportation industry strike also slowed down the process. The study was ultimately conducted 1.5 months behind schedule, yet with sufficient time to manage the entire process as planned, resulting in a professional and well-organized study. Timing delays actually allowed the author more time for background research and familiarization with organization and execution of research activities.

Despite the limitations, the study was successful in all aspects. The completed study provides important insight into future packaging design choices and a deep understanding of consumers' views on the special effects used in cosmetic packaging.

7.3 FURTHER RESEARCH OPPORTUNITIES

One of the notable findings from this study indicates that double-effected packaging has a significant impact on the attractiveness of the product when consumers can physically touch and examine the packaging in more detail. Further research is required to determine which material and embossing combinations enhance product appeal. Moreover, it is essential to investigate the significance of embossing as an effect enhancing packaging attractiveness and determine which patterns are the most appealing to consumers through sensory evaluation. The research template could also be used in other product categories, and to study how special effects affect, for example, the packaging of food products (e.g., pastries), make-up or electronics. In this way, the suitability of different effects for different products could also be compared.

Furthermore, researching the combination of ecological and premium packaging could help the packaging industry to understand and respond to the growing demands of conscious consumers. While consumers are increasingly choosing ecofriendly packaging, cosmetic products are still perceived as luxury goods that require premium packaging. Therefore, identifying different combinations of eco-friendly and premium packaging

would be helpful for environmentally conscious luxury brands in the future.

Exploring the unboxing experience with cosmetic packaging would be a useful area of investigation as some cosmetic products are sold both online and in cosmetic stores without displaying their sales packaging. A successful unboxing experience can significantly increase the value of the product, while unsuccessful packaging can potentially decrease its value. Therefore, it is crucial to research the images created by the sales packaging and special effects used on it, and how the images influence the consumer's perception of the product inside. Both brands and designers can benefit from the results of such research.

The research results could also be utilized by organizing a specific packaging design workshop on the topic of using effects of this research. Based on the results of the research, mixing of effects could help creating new packaging effect solutions that are as pleasing to consumers as possible. Consumers' comments about the effects and the word clouds created from them (appendix 3) could be useful data to open up the thoughts behind the attitudes, and thus provide important information for design process.

7.4 SELF EVALUATION

Upon conclusion of the project, it can be asserted that the previous six months have proven to be highly educational in a multitude of aspects. Initially, the amount of work required was unimaginable, yet as the project progressed, the full extent of the work began to take shape gradually. As a design student, the topic presented initially posed a significant challenge. At the onset of my studies, I never imagined conducting research for my thesis, and simply selecting a topic like this was an accomplishment for me itself. While I had undergone job training and been employed by a packaging research company previously, I had only worked as an assistant and had not been involved in the implementation and background work to such a concrete extent.

During the thesis process, I was thrown into the deep end but found it to be a rewarding experience because I learned new things about my capability. To my surprise, I discovered that I enjoyed conducting data analysis and creating various statistics. The topic of research was already of particular interest to me due to my past experience in cosmetics sales, but in-depth background research and benchmarking broadened my perspective. Preparing

for the research was a truly informative experience, although it was at times rather challenging as I had to learn all the terminology and practices from scratch. Thankfully, I received guidance and assistance from my supervisor, Virpi Korhonen, and learned significantly through independent research.

Extending the research timeline by 1.5 months caused some scheduling complications and increased stress. As the package arrival was delayed, backup plans had to be made to prevent the entire thesis from collapsing due to the lateness of the packaging mock-ups. Fortunately, the packages arrived on time, and the comprehensive groundwork allowed for the packaging research to take place almost immediately.

I was able to recruit the necessary number of consumers from local Facebook groups and the Jodel application, and succeeded in scheduling with 50 answers collected within two days, achieving the target goal. Being a sociable individual, meeting new people and conversing with them was a rewarding experience in addition to enjoying the research process itself. Feedback from consumers

was positive, and many expressed their interest in participating in future packaging studies. It was particularly satisfying to observe participants who had already taken part in the study sharing my publication in local Facebook groups and recommending others to participate the study.

While conducting the research, I received valuable feedback that the receipt list for the gift cards should not be visible, revealing the names and signatures of previous recipients. I immediately addressed the issue and ensured that the names were hidden the rest of the research. Occasionally, I became overly enthusiastic and chatted with participants who had already completed the survey. To prevent any bias, I made a conscious effort to not to discuss about the packages or survey until all participants who were answering at the same time were all ready. Additionally, I encountered a participant in a wheelchair whom I had not anticipated. Nevertheless, I was able to accommodate the individual's needs by moving the tables to ensure accessibility.

Analyzing the research data, acquiring proficiency in using the SPSS program, transferring and visualizing the data, drawing conclusions, and summarizing them in a comprehensible manner

was hard and thought me alot. There were numerous concepts to learn and I believe, having more time would have been beneficial at this point of the thesis process. However, the schedule could not be altered due to transport sector strikes and the availability of materials, necessitating flexibility and adaptation.

Although the thesis primarily focused on research, as a graduate packaging and branding designer, I found inducting the study eye-opening and potentially relevant to my future design works. Also leading a project like this will benefit me in my future working life. Upon conclusion of the thesis process, I am further convinced that considering consumer opinions and behavior during the design process is vital both currently and in the future. I believe that every designer should experience consumer research up close, or at the very least, gain an appreciation for its significance in the design process. Conducting this study strengthened my thought about highlighting a user-centric approach in design processes, whereby the needs and preferences of the end-users are given major consideration. My vision is to pursue advanced studies in the field of design, and I hope to be able to use this study later on in my postgraduate studies.

7.5 FINAL WORDS

This thesis demonstrates that the double effect, consisting of embossing and coating of the entire package with either soft-touch laminate or holography foil, is particularly appealing to consumers. Moreover, the use of a design language reminiscent of nature, simplicity, colorlessness, and lightness of the packaging communicates the ecological nature of the packaging. The study also reveals that premium packaging is perceived as consisting of at least gold, gloss, and embossing, and that a successful three-dimensional design conveys the same sense of premiumity as embossing.

The research findings suggest that aesthetics play a crucial role in the consumer's choice of cosmetic products, emphasizing the importance of packaging design in attracting consumers. The growing ecological trend in consumer behavior highlights the need to communicate the ecologicality of the product through packaging design, by minimizing the use of excess materials and creating an attractive effect with embossing and minimal foil. These insights hold significant

implications for brand building, as well as for design tasks. Future research could further explore the topic of ecologicality in packaging design and address the limitations of the present study, which was based on a relatively small sample size. Nevertheless, the present findings provide a valuable starting point for attracting consumers and creating packaging designs that are eye-catching and ecological.

In conclusion, this study highlights the significant impact of special effects on consumer behavior in the context of cosmetic packaging. As future research directions, I suggest conducting more extensive studies with larger samples and from different perspectives. The findings of this study suggest that consumers prefer embossed and shiny premium packaging in the cosmetic product category and recognize the ecological effects in packaging. The successful combination of these features will be an advantage that increases the shelf-distinctiveness and catches the consumer's attention - which seem to be one definition of a successful packaging design.

First and foremost, I express my gratitude to Ilkka Harju and Leena Yliniemi (Metsä Board) for providing me with the opportunity to conduct this research. I would like to give special thanks to Ilkka, who designed the packaging for the study and encouraged me through the process. A sincere thank you to my supervisor, Virpi Korhonen, for her guidance and expertise in the successful completion of this thesis. I would also like to thank my teachers Oona Casalegno and Noora Nylander for their teaching and support in the past years. Also, I want to thank my colleague Heli Nykänen for the support and Päivi Torkki for ensuring the correctness of language. I extend my appreciation to my dear family, specially Klaus, and friends for their support and encouragement. Lastly, I would like to give a special shoutout to my dog, Dina, for her remarkable patience during my writing flows.

08

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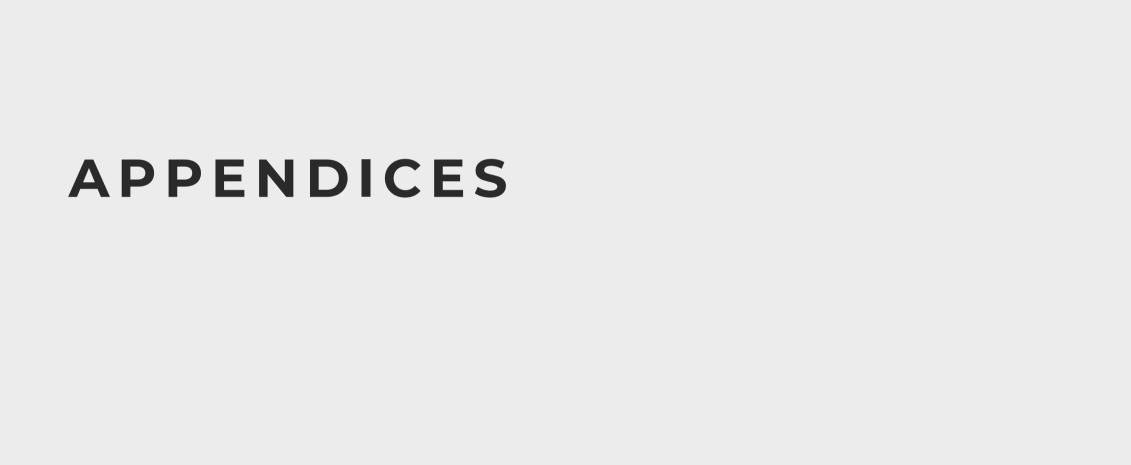
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APPENDIX 1. INTRO TEXT

INTRO (LUETAAN OSALLISTUJALLE ALUKSI)

Tervetuloa pakkausarviointiin. Minun nimeni on xx. Tässä tutkimuksessa haluamme selvittää mielipidettänne erilaisista kosmetiikkapakkauksista. Jokainen pakkaus sisältää saman kasvoille tarkoitetun tuoksuttoman päivävoiteen, joka soveltuu kaikille ihotyypeille.

Tutkimus toteutetaan kahdessa osassa. Ensimmäisellä kierroksella arvoit pakkauksia vain silmäillen niitä. Toisella kierroksella saat luvan koskea ja tutkia pakkauksia lähemmin. Älä siis koske pakkauksiin, ennen kuin annan luvan.

Kysymme maksuhalukkuutta tuotteista kahdesti. Ensin silmämääräisen arvion perusteella ja lopuksi uudelleen, kun olet saanut luvan koskea pakkauksiin. Keskimääräinen hinta vastaavalla tuotteella on noin 14 euroa.

Tutkimus täytetään paperilomakkeelle. Kysythän, jos jokin kysymys tai tehtävä on mielestäsi epäselvä.

APPENDIX 2. QUESTIONNAIRE FORM

Kosmetiikkapakkaustutkimuksen osallistumislomake

> Rastita, jos tämä kuvaa sinua.

Ostan kasmatiikkaa

Ostan kosmetiikkaa vähintään kerran kuussa

Käytän päivittäin tai lähes päivittäin kasvovoidetta

Hienoa. Tervetuloa mukaan!

Pakkausten arviointi

OSA 1.

Seuraavaksi saat arvioida pöydälläsi olevia kosmetiikkapakkauksia. Tällä arviointikierroksella et saa kuitenkaan vielä koskea tuotteisiin. Tuotteet on kirjainkoodattu tehtävien helpottamiseksi. Aloitetaan! *Tässä tutkimuksessa kosmetiikkatuotteeksi lasketaan kaikki kasvo- ja vartalovoiteet, pesuaineet, deodorantit ja antiperspirantit, huulivoiteet sekä meikit, suun- ja hiustenhoitotuotteet.

1. Syntymävuotesi:			
2. Sukupuolesi onmiesnainenmuuen halua sanoa			
3. Kuinka usein ostat kosmetiikkatuotteita* itsellesi tai lahjaksi? Ympyröi parhaiten kuvaava vaihtoehto.			
• Useammin kuin kerran viikossa			
• Kerran viikossa			
• 2-3 kertaa kuukaudessa			
• Kerran kuukaudessa			
4. Mistä ostat kosmetikkatuotteita*? Voit valita useita vaihtoehtoja.			
vaihtoehtoja.			
vaihtoehtoja. • Päivittäistavarakaupasta			
vaihtoehtoja.PäivittäistavarakaupastaKosmetiikkaliikkeestä			
vaihtoehtoja.PäivittäistavarakaupastaKosmetiikkaliikkeestäApteekista			

5. Mikä tuote näyttää houkuttelevimmalta? Rasti valintasi alla olevista kirjainkoodeista. Valitse yksi.
S E H P N U
6. Kirjoita alle, miksi juuri tämä tuote näyttää houkuttelevimmalta?
7. Mikä tuote näyttää mielestäsi ekologisimmalta ? Rasti valintasi alla olevista kirjainkoodeista. Valitse yksi.
S E H P N U
8. Kirjoita alle, miksi juuri tämä tuote on mielestäsi ekologisin?
9. Mikä tuote näyttää mielestäsi ylellisimmältä? Rasti valintasi alla olevista kirjainkoodeista. Valitse yksi.
S E H P N U
10. Kirjoita alle, miksi juuri tämä tuote on mielestäsi ylellisin?

järjestyksessä niin, että vasemmalla on vähiten ekologiselta näyttävä tuote ja oikealla on ekologisimmalta näyttävä tuote.			
VÄHITEN EKOLOGINEN O EKOLOGISIN			
12. Täytä alla oleviin renkaisiin tuotteiden kirjainkoodit järjestyksessä niin, että vasemmalla on vähiten ylellisen näköinen tuote ja oikealla on ylellisimmän näköinen tuote.			
VÄHITEN YLELLINEN VIELLISIN			
13. Kuinka paljon olisit nyt valmis maksamaan tuotteesta sen pakkauksen perusteella? Kirjoita viivalle arvioimasi hinta. Vastaavan tuotteen keskimääräinen hinta on n. 19 euroa.			
S euroa P euroa			
E euroa N euroa			
(H) euroa (U) euroa			

Pakkausten arviointi

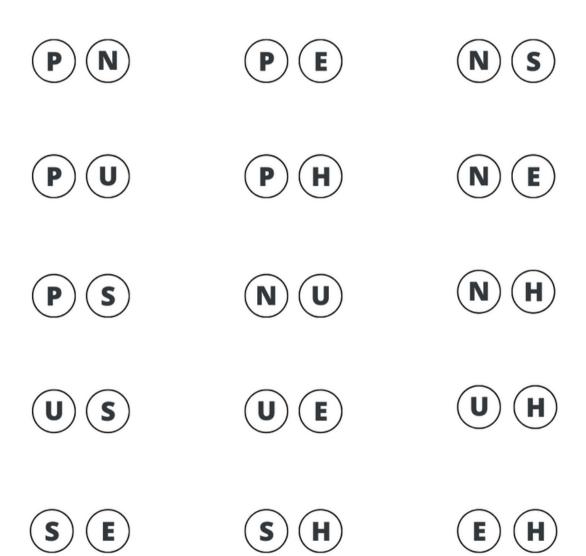
OSA 2.

Nyt saat luvan koskea pakkauksiin, mutta älä avaa niitä. Voit tutustua niihin hetken ja sitten jatketaan!

14. Mikä tuote tuntuu houkuttelevimmalta? Rasti valintasi alla olevista kirjainkoodeista. Valitse yksi.	
S E H P N U	20. Täytä alla oleviin renkaisiin tuotteiden kirjainkoodit järjestyksessä niin, että vasemmalla on vähiten
15. Kirjoita alle, miksi juuri tämä tuote tuntuu	ekologiselta tuntuva tuote ja oikealla on ekologisimmalta tuntuva tuote.
houkuttelevimmalta?	VÄHITEN EKOLOGINEN OOOO EKOLOGISIN
	21. Täytä alla oleviin renkaisiin tuotteiden kirjainkoodit järjestyksessä niin, että vasemmalla on vähiten ylellisen
16. Mikä tuote tuntuu ekologisimmalta? Rasti valintasi alla olevista kirjainkoodeista. Valitse yksi.	tuntuinen tuote ja oikealla on ylellisimmän tuntuinen tuote.
S E H P N U	VÄHITEN YLELLINEN () () () YLELLISIN
17. Kirjoita alle, miksi juuri tämä tuote tuntuu mielestäsi ekologisimmalta?	VARITEN FLEELINEN O O O TEELLISIN
	22. Kuinka paljon olisit nyt valmis maksamaan tuotteesta
	sen pakkauksen perusteella? Kirjoita viivalle arvioimasi hinta. Vastaavan tuotteen keskimääräinen hinta on n. 19
18. Mikä tuote tuntuu ylellisimmältä? Rasti valintasi alla olevista kirjainkoodeista. Valitse yksi.	euroa.
S E H P N U	S euroa P euroa
19. Kirjoita alle, miksi juuri tämä tuote tuntuu mielestäsi	E euroa N euroa
ylellisimmältä?	H euroa U euroa

23. Jos kaikki tuotteet olisivat saman hintaisia, kumman valitsisit? Rasti valintasi.

Valitse yksi jokaisesta parista,



APPENDIX 3. RESEARCH REPORT

sense n insight

31.3.2023 Research report **Consumer Perceptions of Special Effects in Cosmetic Packaging**

A Case Study to Metsä Board

contents

- 1. Research questions
- 2. Methods
- 3. Designs
- 4. Participants
- 5. Results
 - **5.1 Attractiveness**
 - **5.2 Ecologicality**
 - **5.3 Premiumity**
- 6. Conclusions & recommendations

Research questions

- 1. How do special effects affect consumers' perceptions of cosmetic products' attractiveness, ecologicality, premiumity and willingness-to-pay?
- 2. How do consumers' observations based on visual and tactile senses affect their opinions about products? Do their opinions change during sensory evaluation?

- 3. How do special effects affect consumer preferences?
- 4. Which elements of the effects communicate attractiveness, ecology and premiumity?

Methods

Consumer study 16.-17.3.2023

The study was organized in the Sense N Insight research space in the Myyrmanni shopping center in Vantaa, Finland.

Participants filled out a paper form to answer the questions.

Consumers were asked to rank physical cosmetic packaging mock-ups with different special effects by their attractiveness, ecologicality, premiumity, willingness-to-pay, and overall preference.

The study was conducted in two sections. In the first part, the participants evaluated packages based on visual assessment. In the second part, the participants were allowed to touch packages and examine them more closely.



1. The evaluation is based on visual assessment



2. The evaluation is based on both visual and tactile assessments

Designs



Packaging samples used in the study. The packages were designated by letters for ease of answering



Embossing

Embossing paperboard is a printing process that creates a raised or recessed design on the surface of the paperboard to enhance its texture and visual appeal.



Embossing + Holographic foiling

Holographic foiling and embossing is a decorative process that combines the use of metallic foil and embossing techniques to create a three-dimensional holographic effect on paperboard.



Embossing + Soft-touch laminating

Embossing and soft-touch laminating are finishing techniques used in printing to create a raised pattern and a smooth, velvety texture respectively, resulting in a tactile and visually appealing packaging.



Minimalist foiling

Minimalist foiling is a subtle and understated foil stamping technique that adds a touch of elegance and sophistication to designs with minimalist and simple aesthetics.



Offset printing

Offset printing is a popular commercial printing method that uses ink rollers to transfer ink onto a printing plate, which then transfers the image onto paperboard.



Embossing + Minimalist foiling

Minimalist foiling and embossing is a combination of subtle foil stamping and raised pattern techniques used to create a refined and elegant design with minimalistic features.

Participants

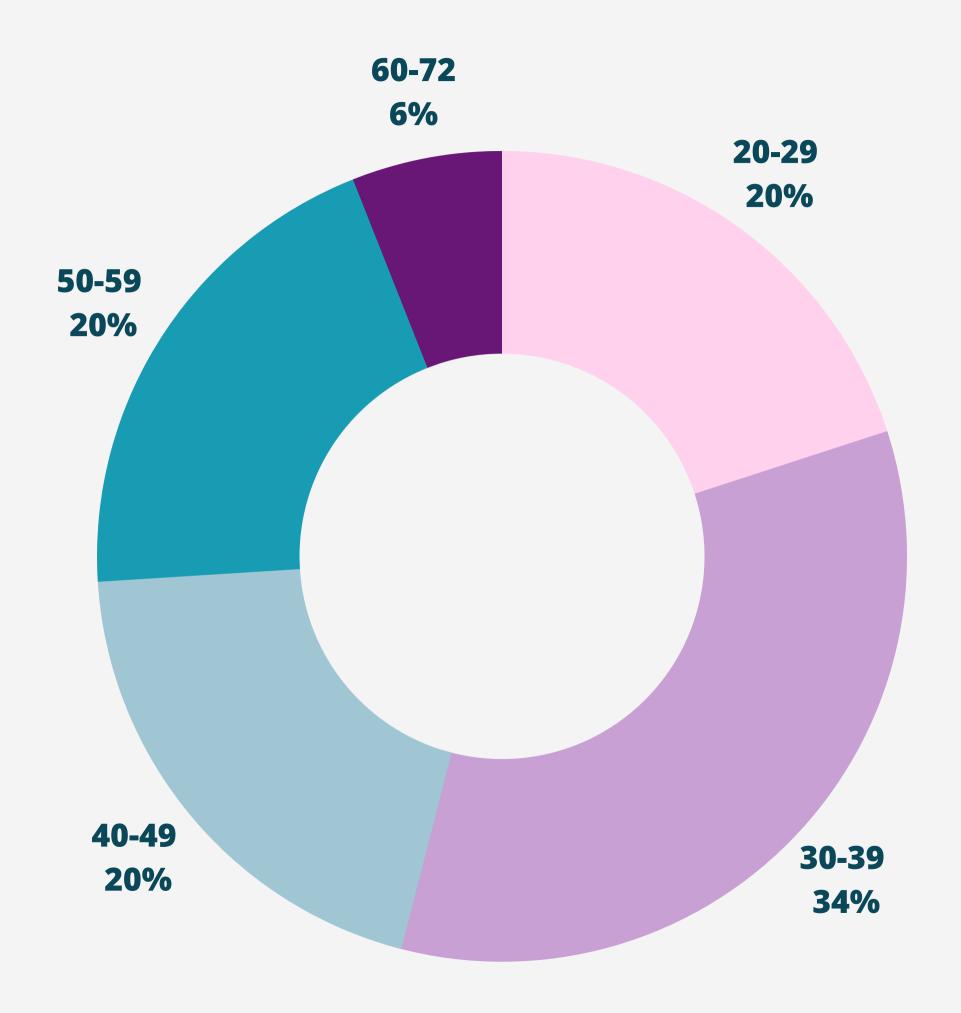


women

5 men

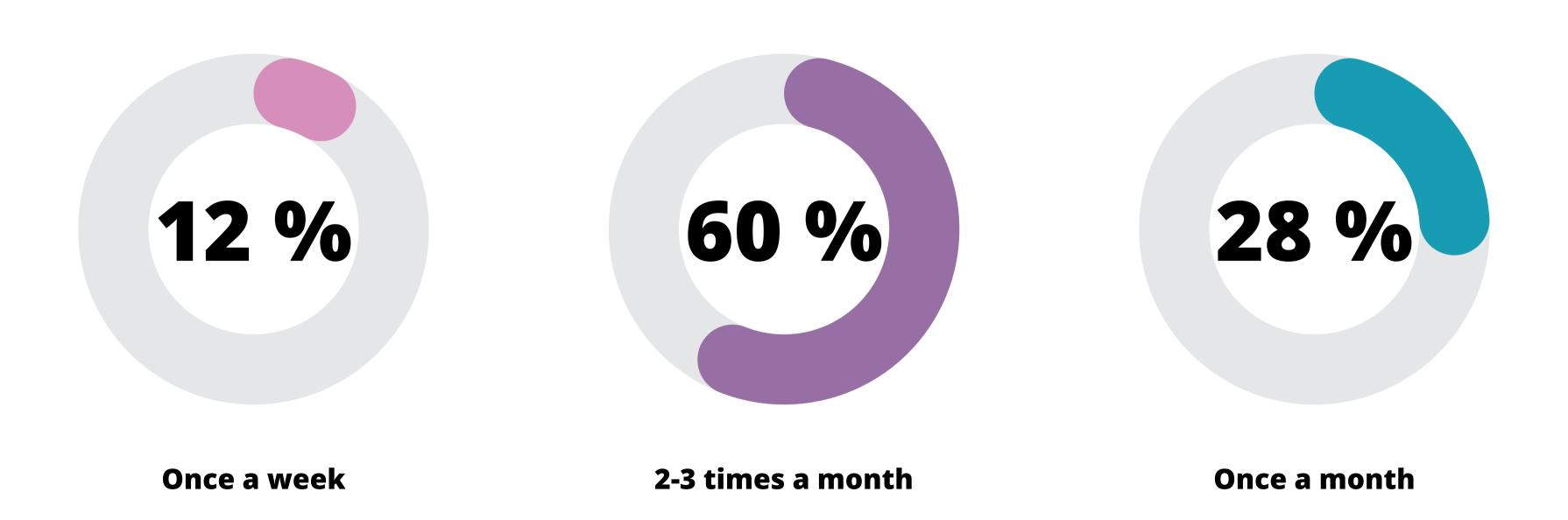
other

Gender distribution N=50





"How often do you purchase cosmetic products?" (N=50)



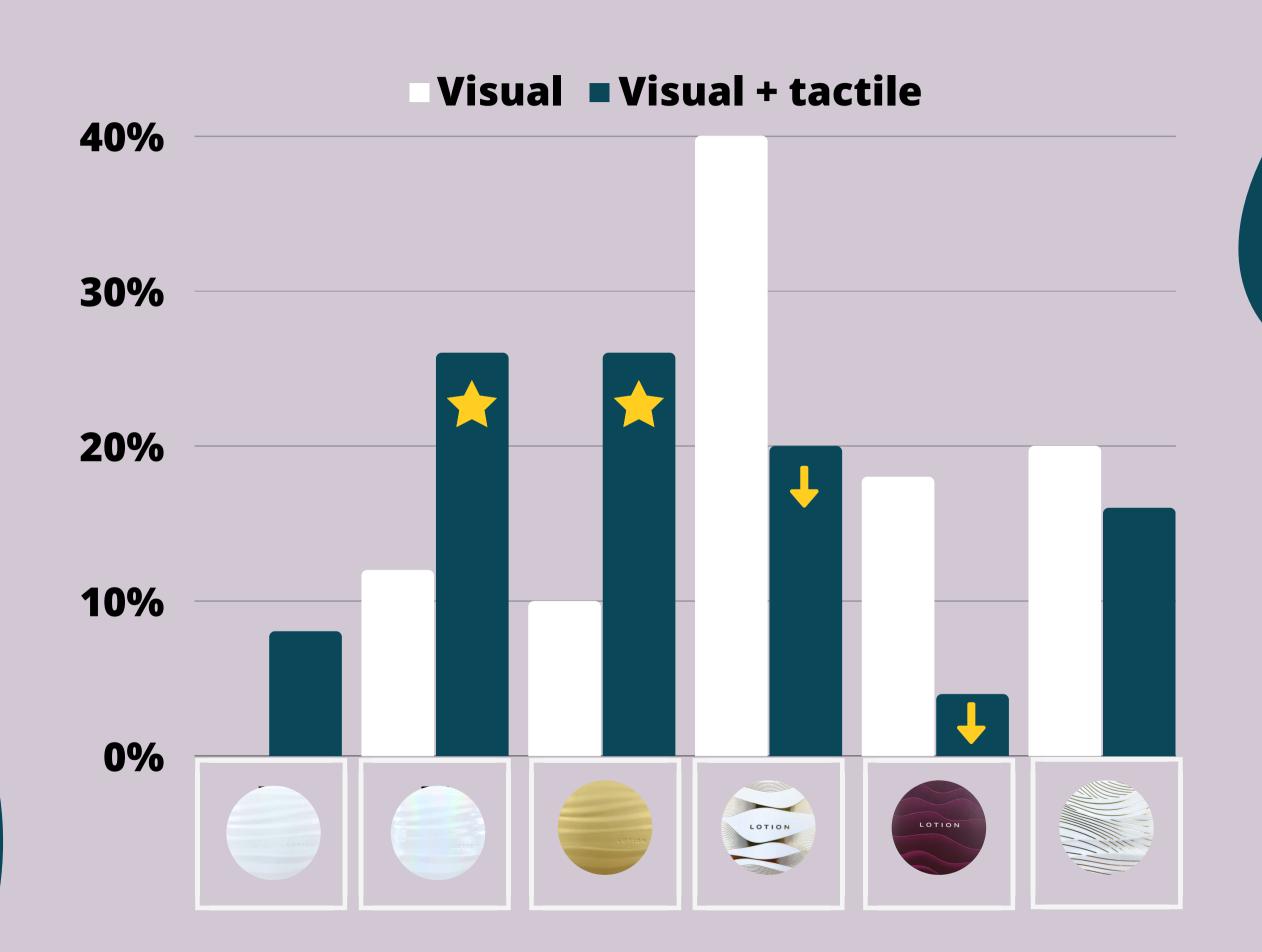
"Where do you purchase cosmetic products from?" (N=50)



Results

Attractiveness

Perceptions on attractiveness based on special effects



Increased the most

Decreased the most

"Name the most attractive"

Observations based on the most attractive special effects

FIN



Embossing + Holographic foiling



"Minimalistinen pakkaus, jossa kuitenkin pieni twist helmiäishohteella" - woman, 38

"Pakkaus näyttää puhtaalta ja kiiltävä pinta vaikuttaa ylellisesti" - woman, 30

"Pakkaus on yksinkertainen, mutta pienet extrat eli kimaltava pinta ja kohokuvio tekevät pakkauksesta houkuttelevan näköisen" - woman, 31

"Pidän sen kiillosta, siisti ja yksinkertainen" - man, 23

"Yksinkertainen on kaunista. Pakkaus on pelkistetyn kaunis ja täten siitä huokuu arvokkuus ja premium -vaikutelma" - woman, 27





"Ihanan tuntuinen kiiltävä pinta, ylellinen" - woman, 53

"Kiiltävä pinta on miellyttävän tuntuinen, kohokuviot tuntuvat mukavilta ihoa vasten" - woman, 30

"Kiva tuollainen painatus, aaltoileva pinta. Kiiltää upeasti valoa vasten" - woman, 39

"Pakkauksen kiiltävä pinta sekä etusivun aaltoilu teki tästä houkuttelevimman. En huomannut etusivun kohokuvioita, kuin vasta nyt" - woman, 45

"Pidän pinnan liukkaudesta, kohokuvioinnista tuotteessa sekä heijastelevista muista sävyistä valon osuessa pakkaukseen" - woman, 52

ENG



Embossing + Holographic foiling



"Minimalist packaging, but with a little twist with a pearly shimmer" - woman, 38

"The packaging looks clean and the shiny surface looks luxurious" - woman, 30

"The packaging is simple, but the little extras, i.e. the shiny surface and embossing, make the packaging look attractive" - woman, 31

"I like its shine, clean and simple" - man, 23

"Simple is beautiful. The packaging is beautiful and therefore exudes prestige and a premium impression" - woman, 27





"Wonderfully feeling shiny surface, luxurious" - woman, 53

"The glossy surface has a pleasant feel, and the raised patterns feel nice against the skin" - woman, 30

"Nice printing, that wavy surface. It shines wonderfully against the light" - woman, 39

"The glossy surface of the package and the wavy side made this the most attractive. I didn't notice the embossing on the front until now" - woman, 45

"I like the smoothness of the surface, the embossing on the product and the reflective other shades when the light hits the packaging" - woman, 52

FIN



Embossing + Soft-touch laminating



"Kullan väri miellyttää silmää" - woman, 65

"Ei liian hieno pakkaus (esim. ei ole kultaisia koristeita) mutta ei liian tylsä (vrt. valkoinen). Näyttää siltä, että osaa asiansa ja seisoo tuotteensa takana ilman hienostelua. Jämäkkä ja ei yritä kosiskella hienouksilla" - woman, 50

"Kultainen väri, näyttää arvokkaalta" - woman, 46

"Premium vaikutelma, erottuu joukosta" - man, 33

"Se osuu silmään ekana" - man, 33





"Kultainen väri, pakkausmateriaali laadukkaan tuntuinen" - woman, 46

"Lähempää tarkastellessa kultainen pakkaus näyttää todella ylelliseltä ja laadukkaalta. Pakettia voisi mieluusti säilyttää esillä kotona.Kohokuviointi todella kivan näköinen ja tuntuinen" - woman, 32

"Mielenkiintoinen pinta" - man, 33

"Tekstuuri ja kartonki tuntuvat muita laadukkaammilta" - woman, 24

"Tuotteen olemus muuttui tuotaessa lähemmäs kasvoja, painatus tuli selkeämmin näkyviin" - woman, 53

ENG



Embossing + Soft-touch laminating



O+

"The color of gold pleases the eye" - woman, 65

"Not too fancy packaging (e.g. no gold decorations) but not too boring (cf. white). It looks like it knows what it's doing and stands by its product without being fancy. Solid and doesn't try to woo with frills" - woman, 50

"Golden color, looks precious" - woman, 46

"Premium impression, stands out" - man, 33

"It catches the eye first" - man, 33



"Golden color, packaging material feels of high quality" - woman, 46

"On a closer look, the golden package seems really luxurious and high-quality. One could happily keep the package visible at home. The embossing looks and feels really nice" - woman, 32

"Interesting surface" - man, 33

"The texture and cardboard seem to be of better quality than in the others" - woman, 24

"The nature of the product changed when brought closer to the face, the print became more clearly visible" - woman, 53

The most attractive



Properties that increase attractiveness

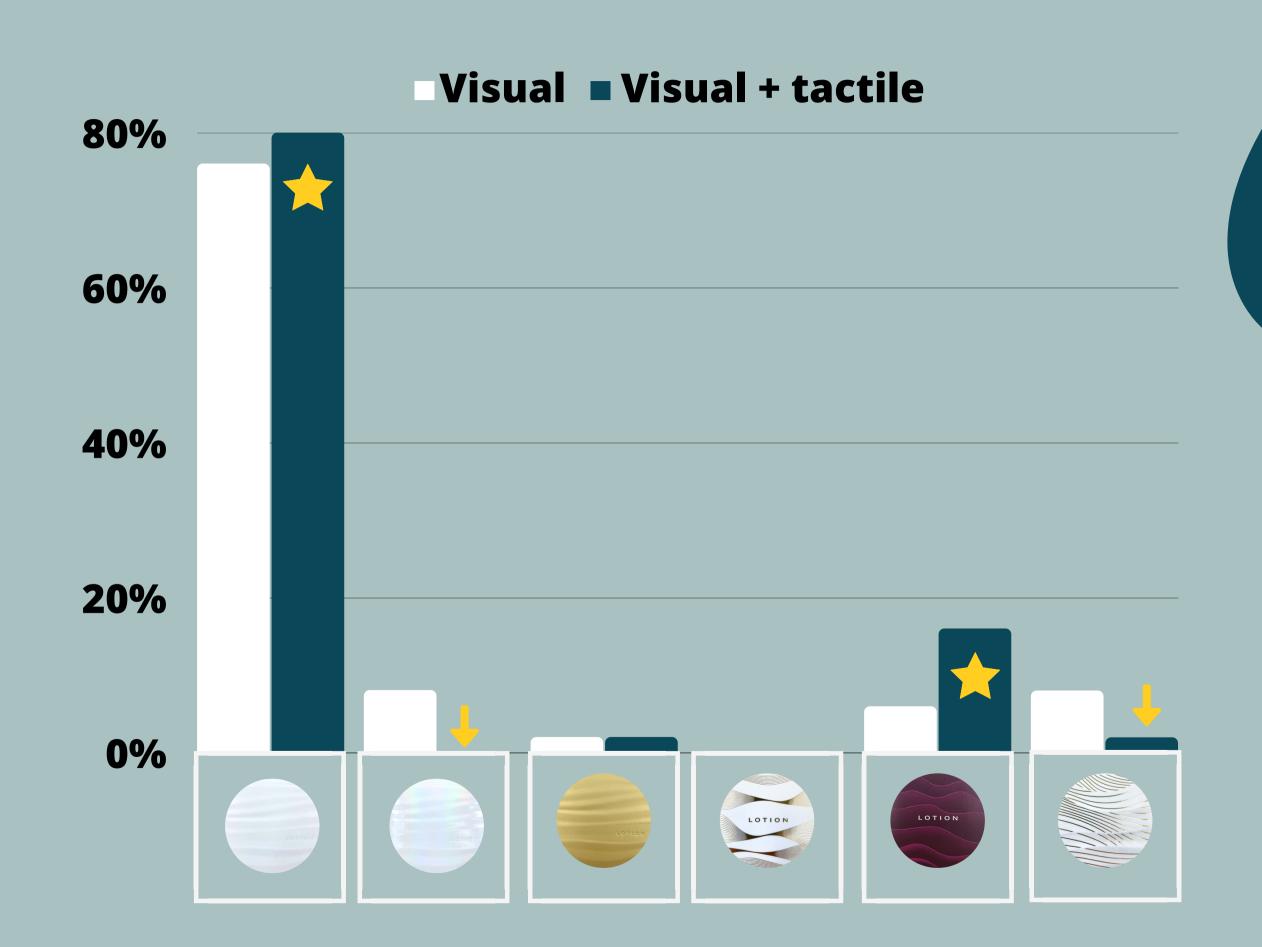
The most repeated properties

- surface (pinta)
- plain (selkeä)
- color (väri)
- text (teksti)
- golden (kultainen)
- luxurious (ylellinen)
- simple (yksinkertainen)
- beautiful (kaunis)

- shiny (kiiltävä)
- pleasant (miellyttävä)elegant (tyylikäs)
- design (kuvio)
- nice (kiva)
- stands out (erottuu)
- feel (tuntuu)
- I like (pidän)

Ecologicality

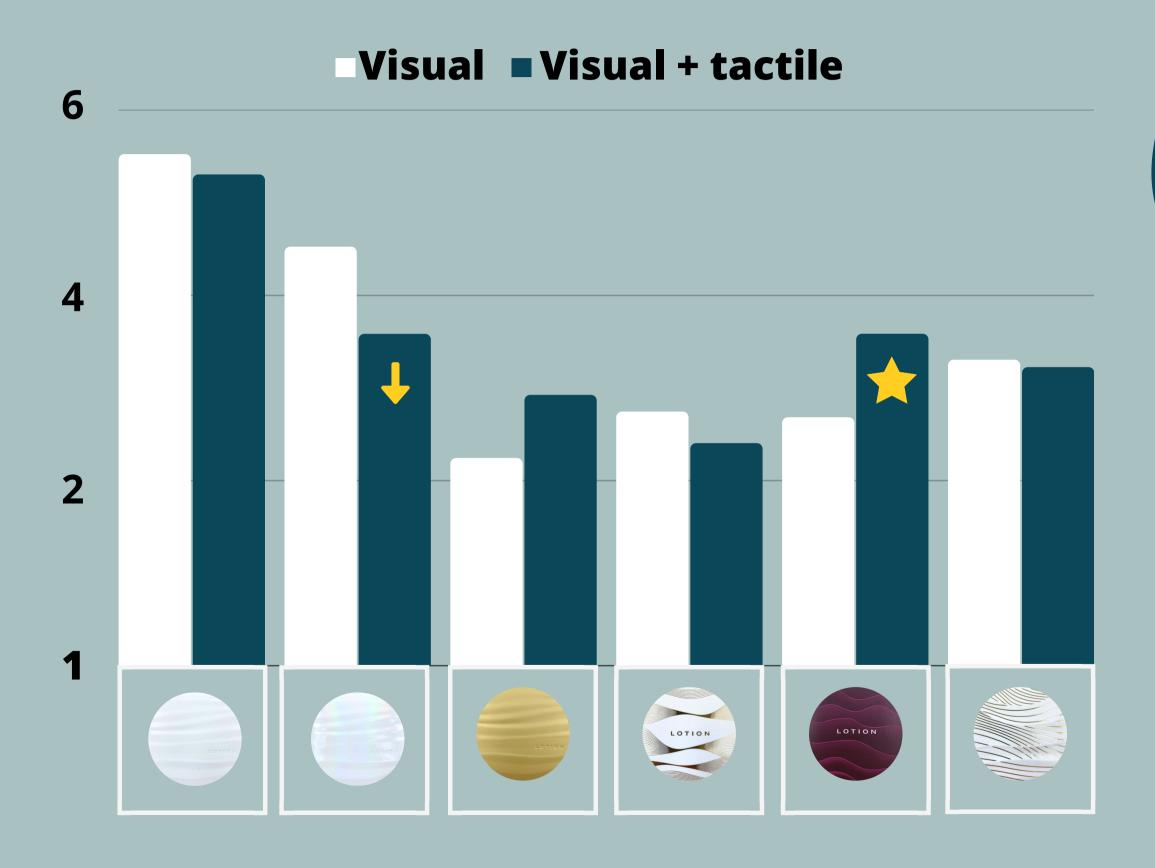
Perceptions on ecologicality based on special effects



Increased the most

Decreased the most

"Name the most ecological"



"Rank from the most to the least ecological"

Scale: 6=most eclological; 1= least ecological

Increased the most

Decreased the most

Observations based on the most ecological special effects

FIN



Embossing



"Ei liikaa värejä" - woman, 72

"Ei mitään ylimääräistä" - woman, 49

"Ei ylimääräisiä värejä laatikossa" - woman, 59

"Hillitty, ei mitään metallia tai foliota mukana" - woman, 37

"Kaikista tavallisin pakkaus, ilman kommervenkkejä" - woman, 34

"Materiaali näyttää ekologiselta, ulkonäköön ei ole lisätty ylimääräisiä elementtejä. Valkoinen väri viestii puhtaudesta ja tuo mieleen ekologisuuden" - woman, 30

"Vähiten ylimääräistä paketissa. Puhdas look" - woman, 38



"Ei käytetty väriaineita, tekstitkin painettu pakkaukseen" - woman, 36

"Ei väripainatusta, yksinkertainen ulkoasu" - woman, 39

"Mattainen pahvisemman tuntuinen pinta antoi sellaisen vaikutelman, vähemmän muovinen" - other, 29

"Pelkistetty kuvio tuo mieleen luonnon" - man, 33

"Selkeä, ei muovinen, kuin puun pinta, luonnollinen" - woman, 47

"Yksinkertaisin pakkaus saa sen tuntumaan ekologisimmalta" - woman, 38

Most ecological

ENG



Embossing



"Not too many colors" - woman, 72

"Nothing extra" - woman, 49

"No extra colors on the box" - woman, 59

"Restrained, no metal or foil included" - woman, 37

"The most ordinary package of all, without frills" - woman, 34

"The material looks ecological, no extra elements have been added to the appearance. The white color communicates cleanliness and brings to mind ecology" - woman, 30

"Least extra elements on the package. A clean look" - woman, 38



"No dyes were used, and the texts were also printed on the packaging" - woman, 36

"No color printing, a simple look" - woman, 39

"The matte surface with a more cardboard feel gave that impression, less plasticky" - other, 29

"The restrained pattern reminds me of nature" - man, 33

"Clear, not plastic, like the surface of wood, natural" - woman, 47

"The simplest packaging makes it feel the most ecological" - woman, 38

Most ecological

FIN



Offset printing



"Kuviosta tulee mieleen puun säikeet. Näyttää siltä, että materiaali voisi olla kierrätyspahvista" - woman, 37

"Laineet pakkauksen kyljissä, tumma väri myös" - woman, 65

Increased the most



"Yllätti, että tämä oli pahvisimman tuntuinen" - woman, 34

"Varmasti vain sen takia, että pakkaus tuntuu ja näyttää normaalilta pahvilta" - woman, 35

"Pahvinen materiaali tuntuu ekologiselta, ei ylimääräisiä elementtejä" - woman, 30

"Kevyt, eli ei vaadi niin paljon raaka-ainetta, värin puolesta voidaan todennäköisesti käyttää tehokkaasti kierrätettyä materiaalia (ei tarvetta valkaisulle). Ei hirveästi viimeistelyä, esim. kohokuviointia, ei mitään turhaa" - woman, 32

"Ei painokuvioitu, vain kahta väriä" - man, 34

ENG



Offset printing



"The pattern reminds me of wood fibers. It looks like the material could be recycled cardboard" - woman, 37

"Waves on the sides of the package, dark color too" - woman, 65

Increased the most



"I was surprised that this felt like cardboard" - woman, 34

"Probably just because the packaging feels and looks like normal cardboard" - woman, 35

"The cardboard material feels ecological, no extra elements" - woman, 30

"Light, meaning it doesn't require so much raw material, you can probably use effectively recycled material for the color (no need for bleaching). Not terribly much finishingsuch as embossing, nothing unnecessary" - woman, 32

"Not embossed, just two colors" - man, 34



Properties that increase ecologicality

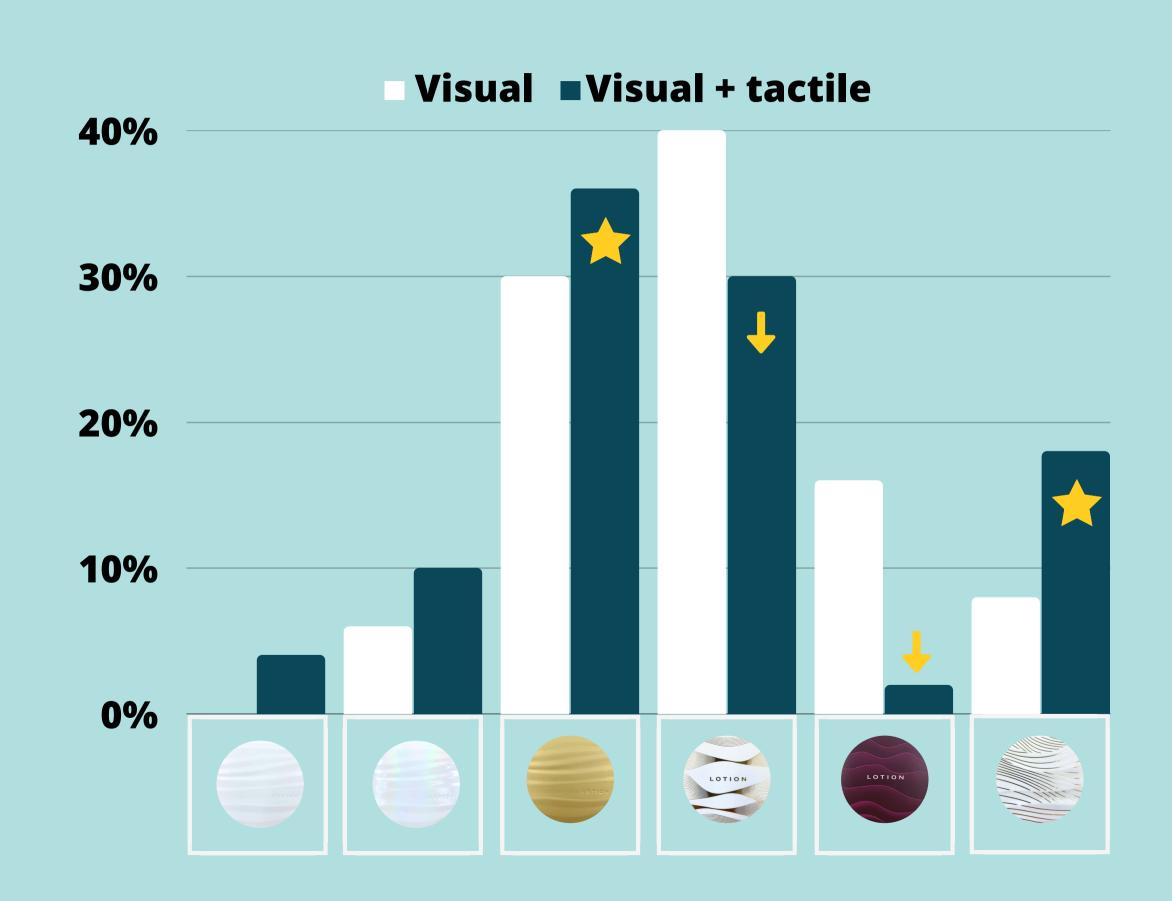
The most repeated properties

- white (valkoinen)
- color (väri)
- simplified (pelkistetty)
- plain (yksinkertainen)
- no colors (ei värejä)
- least (vähiten)
- extra (ylimääräistä)
- without (ilman)

- wood (puun)
- surface (pinta)
- used (käytetty)
- material (materiaali)
- natures (luonnon)
- simple (simppeli)
- clean (puhdas)
- matte surface (mattapinta)

Premiumity

Perceptions on premiumity based on special effects

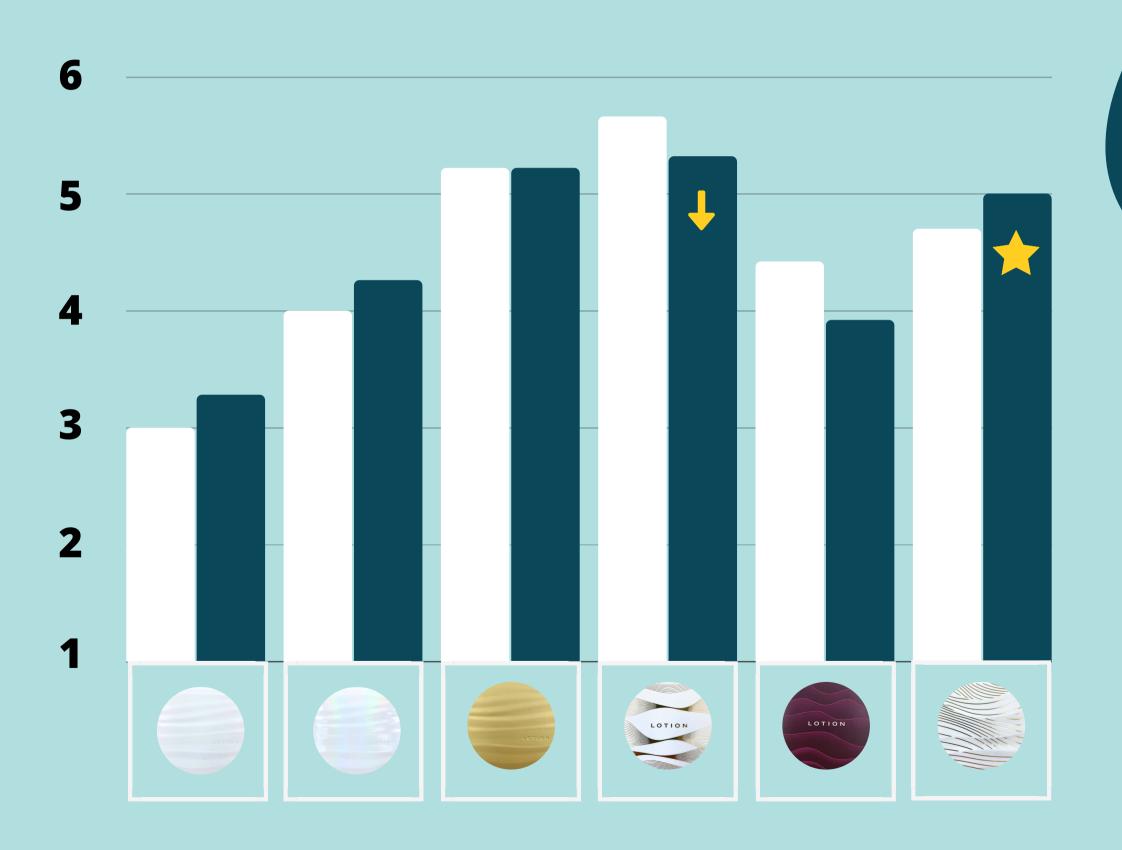


"Name the most premium"

Increased the most

Decreased the most

Visual Visual +tactile



"Rank from the most to the least premium"

Scale: 6=most premium; 1= least premium

Increased the most

Decreased the most

Observations based on the most premium special effects

FIN



Embossing + Soft-touch laminating



"Ehkäpä tuo kultainen pakkausväri" - woman, 57

"Kullan väri tekee ylelliseksi" - woman, 65

"Kultainen väri luo ylellisen mielikuvan. Olettaisin, että tuote olisi kaikista kallein" - woman, 36

"Kultainen väri viestii ylellisyydestä, yksinkertainen kuosi viestii ylellisyydestä" - woman, 30

"Premium vaikutelma, kulta on kulta" - man, 33





"Koen että tämä pakkaus ei ole sellaisessa hintaluokassa mihin yleensä kallistuisin" - woman, 23

"Kohokuvioinit ja mattainen tuntu antavat ylellisen vaikutelman. Materiaali tuntuu aavistuksen tukevammalta / painavammalta, joten antaa vaikutelman laadusta" - woman, 32

"Kulta toimii, tulee kallis vaikutelma" - woman, 35

"Näyttää laadukkaalta, pehmeä pinta, yksinkertaisen tyylikäs, kullan värinen" - woman, 46

"Pinnoite on houkutteleva" - man, 33

"Tykkään tuntumasta ja pinnasta. Eikä sitä muovipintaa. Kulta on aina ylellistä" - woman, 47

ENG



Embossing + Soft-touch laminating



"Maybe that golden packaging color" - woman, 57

"The gold/golden color makes it luxurious" - woman, 65

"The golden color creates a luxurious image. I would assume that this product is the most expensive of all" - woman, 36

"The golden color communicates luxury, the simple pattern communicates luxury" - woman, 30

"A premium impression, gold is gold" - man, 33



"I feel that this package is not in the price range I would normally go for" - woman, 23

"The embossed patterns and matte feel give a luxurious impression. The material feels a little sturdier/heavier, so it gives the impression of quality" - woman, 32

"Gold works, it gives an expensive impression" - woman, 35

"Looks of high quality, soft surface, simply elegant, gold color" - woman, 46

"The coating is attractive" - man, 33

"I like the feel and surface. And it's not that plastic surface. Gold is always luxurious" - woman, 47

Named the most premium

FIN



Minimalist foiling



"Kaunis ja ajaton kuvio, kultaiset yksityiskohdat" - man, 33

"Kullalla kirjaillut tehosteet ja tekstit viestivät ylellisyydestä ja grafiikka ei ole yliampuva" - man, 28

"Kullan ja kuvion yhdistelmä kielii ylellisyyttä / laatua. Tästä kielii myös kultainen teksti" - woman, 35

"Kulta, tekstissä ja sopivassa määrin ulkonäössä antaa loistokkaan ja ylellisen ulkonäön" - woman, 47

"Kultainen ja valkoinen väri, kuviot ja teksti" - woman, 46

"Tyylikäs pakkaus herättää mielenkiinnon tuotetta kohtaan" - woman, 46





"Design = aallot, kullan väri, myös pakkauksen kannessa teksti kullan värinen" - woman, 52

"Fine-line foliot näyttää siltä ja kullitettu logo on aina luksus" - woman, 30

"Kullan väriä käyetty harkitusti, hohtaa kauniisti valossa" - woman, 36

"Ohuet kultaiset viivat taittavat valoa kauniimmin. On selkeä kokonaisuus" - woman, 45

"Valkoinen / kultainen väritys, hienot kuviot, kultainen teksti, materiaali laadukkaan tuntuinen, teksti näkyy hyvin" - woman, 46

ENG



Minimalist foiling



"Beautiful and timeless design, golden details" - man, 33

"Effects and texts embroidered in gold convey luxury, and the graphics are not overpowering" - man, 28

"The combination of gold and that pattern speaks of luxury/quality. The golden text also speaks of this" - woman, 35

"Gold, in the text and to the right extent in the appearance, creates a glorious and luxurious appearance" - woman, 47

"Golden and white coloring, patterns and text" - woman, 46

"Stylish packaging arouses interest in the product" - woman, 46





"Design = the waves, gold color, also the text on the cover of the package is gold-colored" - woman, 52

"Fine-line foils look like that and a gilded logo is always a luxury" - woman, 30

"The golden color is used thoughtfully, it shimmers beautifully in the light" - woman, 36

"The thin golden lines reflect the light more beautifully. A cohesive whole" - woman, 45

"White/gold coloring, nice patterns, golden text, the material feels of high quality, the text is well visible" - woman, 46

FIN

foiling





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"Yksinkertaisen tyylikäs kuviointi antaa ylellisen ja luksusmaisen vaikutelman tuotteesta. Laadukkaan näköinen ja antaa ns. puhtaan vaikutelman" - woman, 24

"Visuaalisesti kaunein, koristelluin" - man, 34

"Pakkauksen kultakuvio tekee pakkauksesta ylellisen" - woman, -47





"Kulta, kohokuviot, tekstuuri, kiiltävät kirjailut" - man, 28

"Kultaiset kuviot ja pinnan muodot" - woman, 45

"Mysteerisin ja kaunein" - man, 34

"Pakkaus oli loppujen lopuksi nätti, erottuva ja vastaa kaupoista saatavia ylellisempiä tuotteita" - woman, 24

"Tuntuu, että sisältökin on varmaan laadukas tuote, kun pakkaus on hienostunut" - woman, 72

ENG



Embossing + Minimalist foiling



"The simple, elegant design gives a luxurious look and impression of the product. Quality looking and giving a so-called clean impression" - woman, 24

"Visually the most beautiful, the most decorated" - man, 34

"The gold pattern on the packaging makes it luxurious" - woman, -47

Increased the most



"Gold, embossing, texture, shiny embroideries" - Man, 28

"Golden patterns and surface shapes" - woman, 45

"The most mysterious and beautiful" - man, 34

"The packaging was pretty, distinctive, and similar to the more luxurious products available in stores" - woman, 24

"It seems that the contents are probably a high-quality product, when the packaging is sophisticated" - woman, 72



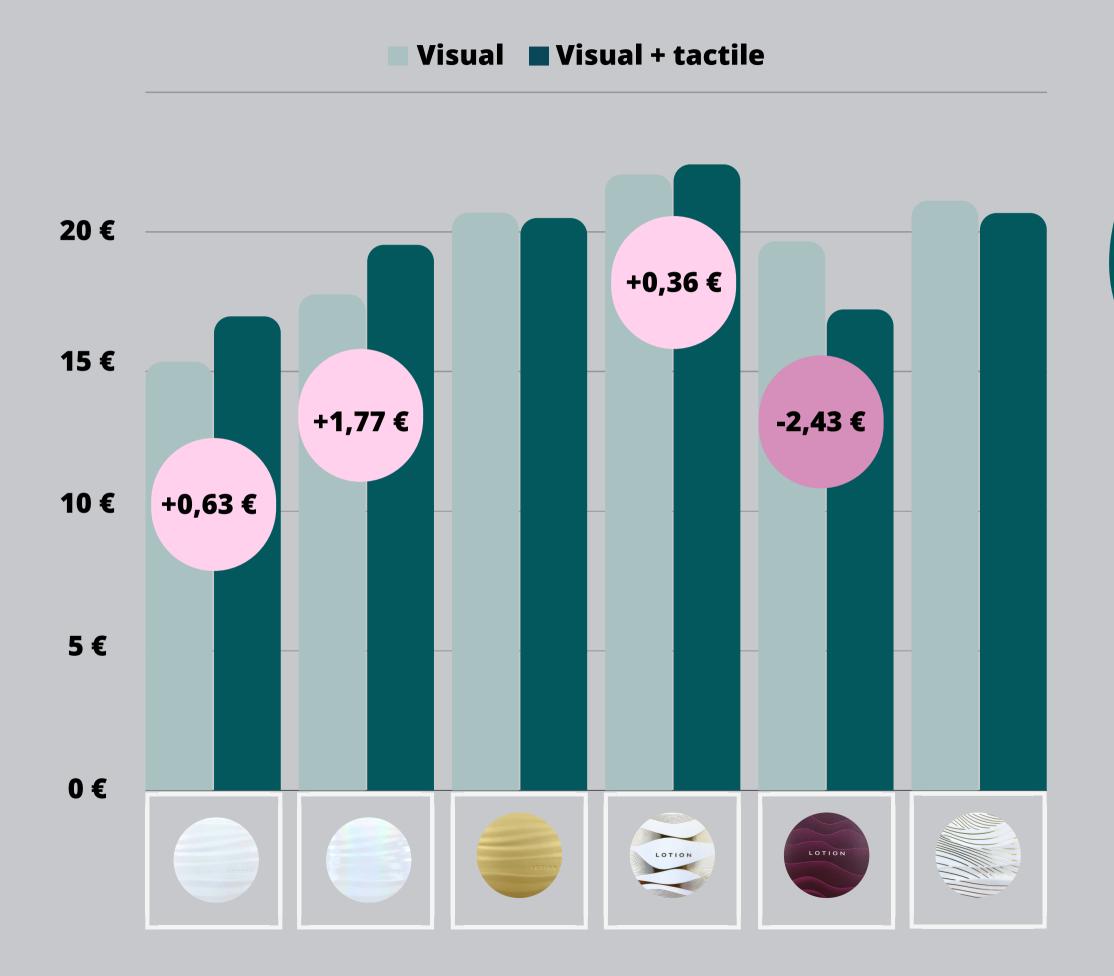
The most repeated properties

- golden (kultainen)
- color (väri)
- gold (kulta)
- gold colored (kullanvärinen)
- text (teksti)
- surface (pinta)
- appearance (vaikutelma)
- stylish (tyylikäs)

- patterns (kuviot)
- premiumness (ylellisyys)
- quality (laatua)
- shiny (kiiltävä)
- details (yksityiskohdat)
- design
- premium
- combination (yhdistelmä)

Willingness-to-pay

The average price of a similar cosmetic product was defined as 19 euros.



Willingnessto-pay increased for 3 products

Overall favorite

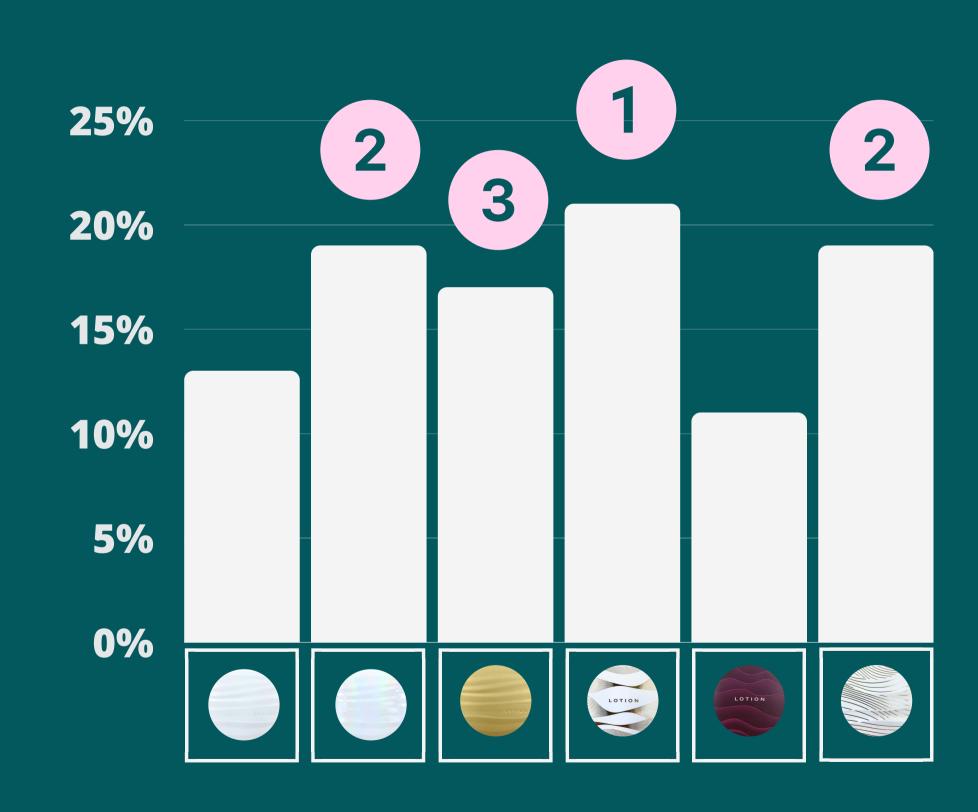
The ranking was made by comparing each packaging with another (pairwise comparison).

The evaluation is

and tactile

assessments

based on both visual



"What is your favorite?"

Conclusions & recommendations



Attractiveness varied the most





The biggest variation in the sensory evaluation was seen when finding out the most attractive packaging. Based on a visual assessment alone, the minimalist foiling was clearly ranked/named as the most attractive. When the participants were given permission to touch the products in the second round of the study, the attractiveness of the minimalistic foiling dropped by 50%.

Holographic foiling and golden soft-touch lamination, on the other hand, became more attractive. The golden soft-touch lamination was the second least attractive in the first round, based only on the visual evaluation.







Highest decrease in attractiveness



-16%



-20%

Highest decrease in sensory evaluation occurred for effects without embossing

Based on the visual evaluation, the most attractive packages were defined as those that stood out from the others. The participants mentioned e.g., the dark purple standing out well from the lighter designs. The minimalist foiling was described as elegant and valuable looking. The attractiveness decreased the most in these packages without embossing.

Double effect increased attractiveness

When the participants were allowed to touch the packages after visual assessment and asked again about attractiveness, packages with embossing were determined as the most attractive. The golden softtouch laminated and embossed packaging was described as pleasant and valuable, and its surface texture surprising. The participants thought the holographic foiling was beautiful, and its vivid and shiny surface increased its attractiveness. Both packages increased their attractiveness when seen/observed more closely and in a different light.

Highest increase in attractiveness



+16%



+14%





The most ecological packaging stood out most clearly

The most ecological packaging was the simplest. The only special effect on it was the embossing. White paperboard was thought to be clean, and for some participants, it was messaging about recyclability. Participants said the embossing looked and felt somehow natural. The effect was said to resemble trees or waves.

The clean and plain design improved its scores even more in the second part of the sensory evaluation, when the participants were allowed to touch the packaging. 80% preferred the embossed packaging as the most ecological. The embossing was said to look and feel nice, and the effect was mentioned more often in the second part. Some participants said they didn't notice the effect before they were able to touch the packaging.

Highest decrease in ecologicality



The holographic foil design decreased the most in the category of ecology. In the second round, none of the participants named it the most ecological. This is probably because during visual assessment some participants confused the plain white embossing with this packaging, and therefore thought they were similar. It was only when they were allowed to touch the packages that some participants paid attention to the different surfaces.

Highest increase in ecologicality



The offset-printed purple package raised its ecological image the most in the second part of the sensory evaluation. The package was said to have a surprising feel, its structure was described as lighter compared to other packages, and its wavy pattern reminded participants of a natural surface.







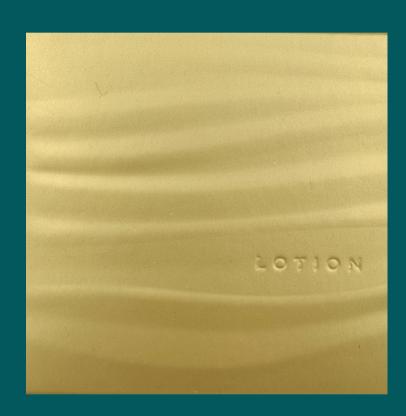


The most premium packaging had golden and embossed details

The most dispersion occurred for the packages that were ranked the most premium, but all three share a similarity: golden and embossed details. They were most often mentioned as the elements that made the packages stand out from the rest.

Of the three packages that were preferred as premium, two packages used two special effects (golden soft-touch laminate + embossing, and minimalist foiling + embossing), and the third one (minimalist foiling) was mentioned to have the most three-dimensional and vivid pattern. The vivid, three-dimensional surface of the packaging was perceived as the most premium, and feeling the packaging in the hand improved the willingness-to-pay in the premium category.

Named the most premium



The golden soft-touch laminated packaging was selected as the most premium in the sensory evaluation. The feel of the packaging was described as luxurious and soft, and some participants were willing to decorate their bathroom with this packaging.

Ranked the most premium and favorite



The minimalist foiling was rated the most premium, and the package was chosen as the most favorite of all the packages. The combination of white and gold was described as sophisticated and luxurious. Light-reflecting shiny foiling, patterns with thin lines, and golden text formed the most popular and luxurious design combination.

Highest increase in ranking and naming the most premium



Participants preferred the embossed and minimalist foiling in the second round of sensory evaluation. The embossing was mentioned to look playful in different lighting, and therefore it fit well together with the foiled details. The golden pattern of this packaging was also praised, and the design was described as mysterious.

Recommendations

Attractiveness

A combination of minimalist foil and embossing was the most eye-catching

Based on the visual assessment, the packages that were named the most attractive ones caught the attention of consumers first. Brands could use these effects to make new products stand out on store shelves, and in cosmetic gift packaging on displays.





Attractiveness

The feel of the effect has a significant impact on attractiveness

The biggest change in attractiveness occurred in the second round of the sensory evaluation. Packages that increased their attractiveness most in consumers' perception had double effects on their surface. The surprising feeling from touching the package improved/increased the attractiveness of the products. These effects could be used for example on the packaging of flagship products or anti-aging series.





Ecologicality

Embossing could have been noticed better in a store environment

When assessing ecology, there were no major changes in the sensory evaluation. The white embossed packaging was clearly considered the most ecological in both evaluation rounds. Even the plain white packaging was generally liked, the participants gave numerous comments about the poor readability of the text, which presumably affected the overall attractiveness of the entire packaging. The readability of the texts could be improved, for example, by combining the wavy embossing with a natural color offset printing effect in the texts, which could increase the package's rankings in other categories as well.

Embossing could have been noticed better in a store environment where the cosmetic packaging shelves are often lit from below, thus emphasizing the front of the packaging. Embossing could be used for dermo-cosmetic brands, as well as moisturizing, creamy textured no-fragrance cosmetics, or natural cosmetics.



Premiumity

Consumers prefer premium-looking products in the category of cosmetics

In the premium packages, the most common features were clear. They were repeated in both sensory evaluations, and attention was paid to them throughout the evaluation. Gold, shine, and embossing, as well as the commonly mentioned three-dimensionality, either physically in the effect or visualized in the graphics, defined the packaging in the premium category.

All packages that succeeded in premiumity succeeded also in attractiveness and were ranked top 3 in the Overall favorite -category. This shows that the consumers prefer premium-looking products in the category of cosmetics, and it is therefore desirable to message about premiumity in the packaging design. Golden designs fit perfectly to premium and luxury brands, anti-aging series and gift packaging.









Premiumity & ecologicality

A mixture of foil and embossing could create an ecological and premium design

By combining the clean and plain ecological design with the golden details used in the premium category packaging, for example by emphasizing only the text, but leaving out other graphic elements, it would be possible to create packaging that communicates both ecologicality and premiumity to the consumers.





Further research opportunities

The study found that double-effected packaging has a significant impact on the attractiveness of the product, and further research is needed to identify which material and embossing combinations enhance product appeal. Additionally, researching the combination of eco-friendly and premium packaging could help luxury brands respond to the demands of conscious consumers.

It is crucial to research the images created by the sales packaging and special effects used on it, and how the images influence the consumer's perception of the product inside. Both brands and designers can benefit from the results of such research.

The research results could also be utilized by organizing a packaging design workshop on the topic of using effects of this research. Based on the results of the research, mixing of effects could help creating new packaging solutions that are as pleasing to consumers as possible. Understanding the consumers attitudes behind themes such as "attractiveness", "premiumity" and "ecologicality" brings much more value to the packaging innovations from design aspect.

Researching this topic more broadly and implicating the results on future design processes increases the shelf-distinctivness of the products and catches the consumer's attention.

Final words

The observations presented above apply especially to cosmetic products that are purchased from walk-in stores, as the study was conducted with physical mock-ups. However, it is worth noting that on the market there are currently cosmetic products that are not displayed online or on store shelves in their sales packaging, but directly in their product packaging (jars, etc.). It is important to note that the sales packaging is crucial part of the product even if it is not always visible in a sales situation, and therefore its properly designed appearance increases the value of the product in the eyes of the target group. Packaging is a major part of the product's aesthetics and creates an image of the content for the consumer and performs the unboxing experience.

Based on the background research, it can be stated that special effects are used very sparingly in the packaging of cosmetic products. For example, the use of embossing is one

effective way to make a product stand out from competitors, and attract customers to choose that particular product. Sensory evaluation is an effective way to determine how the packaging attracts consumer attention. Although, for example, shiny and golden colors stand out quickly, the use of embossing can increase the value of the package, as it entices the consumer to touch and examine the package in more detail. The feeling of embossing increases the attractiveness of the packaging.

Although eco-friendliness is a megatrend that guides consumers' purchasing decisions, users of cosmetic products still value luxury and aesthetics. It is important that the product packaging is able to communicate both features, while remaining distinctive and attractive compared to competitors.