

## Panasonic and KOSÉ Set to Commence Verification Test for Personalized Proposals Utilizing Snow Beauty Mirror

**Tokyo/Osaka, Japan** - Panasonic Corporation is collaborating with KOSÉ Corporation to conduct a joint verification test using Snow Beauty Mirror, a system under development by Panasonic, with the aim of offering personalized proposals at Maison KOSÉ, a store which is due to open on December 17. Through this initiative, Panasonic will help make new personalized proposals that meet the diverse needs of its customers.



Exterior image of Maison KOSÉ



Snow Beauty Mirror (Displays the results of skin analysis covering five categories)

People's values and lifestyles are becoming increasingly diverse. In today's world, everyone requires something different from their cosmetics. Meanwhile, customers are confronted with a deluge of information through the Internet and social media, which sometimes makes it difficult for them to select cosmetics that really suit their needs. A solution to this conundrum is personalized proposals which utilize digital technologies and data to introduce individuals to the optimal products and services.

Maison KOSÉ is a new type of concept store, a place where people will be able to come and experience these personalized proposals firsthand using Snow Beauty Mirror. Visitors will also be able to try out Customized Sheets (provisional name), which adopts the Make-up Sheet technology currently under development at Panasonic.

### ■ Functions of Snow Beauty Mirror and content of verification test

#### 1. Skin analysis

All customers need to do is sit in front of the mirror. The system then analyzes the customer's skin profile and displays numerical data instantly on the mirror. Contactless sensors embedded in the mirror detect the condition of both the skin's surface and below the surface. With a degree of precision on par with medical devices, the system detects not only spots, wrinkles, smile lines, pores and skin tone, but also hidden spots otherwise invisible to the naked eye. Then, based on digital counselling and analysis results, the system recommends the optimal package for each individual customer from among KOSÉ's products and services spanning multiple brands<sup>1</sup>. This function utilizes facial recognition and image processing technologies used in digital cameras, et al.



Snow Beauty Mirror (spots analysis)

## 2. Ideal face image system

Combining genetic algorithms, developed as a joint venture between KOSÉ and Meiji University, with Panasonic's image processing technologies has enabled the creation of a system which makes it possible to visualize a person's "ideal face" from facial image data—that is, how the customer would really like to appear. Snow Beauty Mirror's high-precision skin analysis function detects the customer's skin conditions in terms of pores, spots and wrinkles, as well as the skin's tones and brightness, and adjusts the parameters of this data to create around 500,000 facial image patterns. The customer selects their preferred facial image from among randomly displayed facial images, generating their ideal face in a short time. The system can visualize the differences between the customer's ideal face and current appearance, while providing tips on the perfect foundation tone, texture and application techniques to help them get closer to their ideal face.

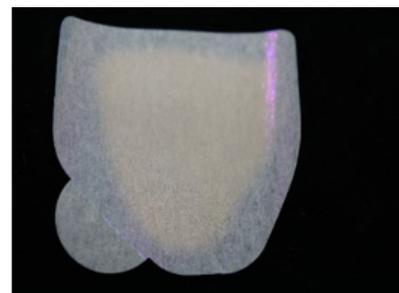


Ideal face image system

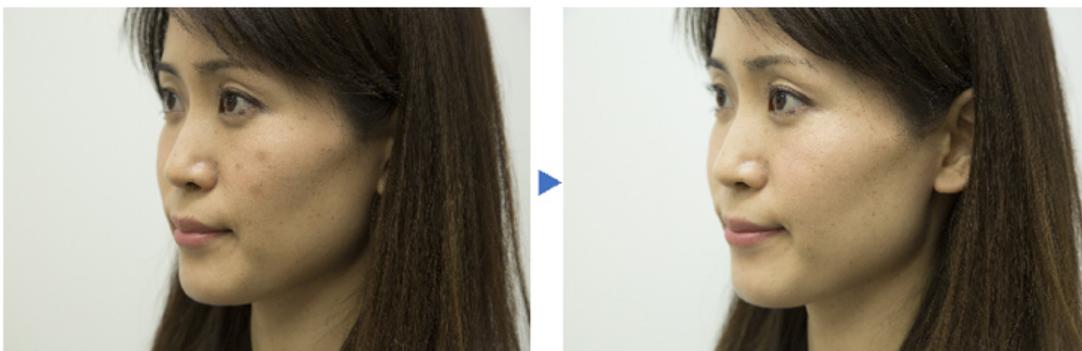
## 3. Customized Sheets which apply Make-up Sheet technology

Currently under development at Panasonic, Make-up Sheets are ultra-thin<sup>2</sup> cosmetic sheets printed with tones that perfectly match the customer's skin. They combine skin analysis data from Snow Beauty Mirror, and the company's proprietary printing technology. Customers simply need to stick the sheets over areas of concern on their cheeks or temples.

In this verification test, Panasonic will combine its Make-up Sheet technology, proprietary skin tone analysis technology, and printing technology with KOSÉ's extensive knowledge of cosmetic development. The aim is to create Customized Sheets (provisional name) that achieve a natural color match and an ideal fit with the customer's skin.



Make-up Sheet



Before and after application of the Make-up Sheet

Panasonic will continue to fuse its cutting-edge technologies with KOSÉ's development capabilities in cosmetics to expand the scope of Snow Beauty Mirror, pursuing possibilities that go beyond the field of beauty treatment. In this way, the company will meet the diverse needs of its customers and better contribute to society through improved QOL.

## About Maison KOSÉ

A fun concept store stocking and linking all KOSÉ brands<sup>3</sup>, providing customers with an early chance to try a range of new software and hardware relating to cosmetics and beauty treatment. The store facilitates new forms of communication which fuse digital and experiential approaches, exploring new possibilities for the next generation of cosmetic experiences and working to connect customers digitally to the store. It also serves as a place of communication with customers, functioning as a seat of learning where information and experiences can be quickly fed back into the company.

### (Shop Information)

Shop name	Maison KOSÉ
Address	7-10-1 Ginza, Chuoku, Tokyo
Floors	2 floors
Area	Approx. 500m <sup>2</sup>
Opening day	December 17th, 2019
Business hours	Open 11:00-20:00 (Close: Irregularly)

### Notes:

1. KOSÉ Group's skin care brands, excluding ALBION
2. Thickness of 100 nanometers (one nanometer = one billionth of a meter)
3. Excluding some products

### About Panasonic

Panasonic Corporation is a worldwide leader in the development of diverse electronics technologies and solutions for customers in the consumer electronics, housing, automotive, and B2B businesses. The company, which celebrated its 100th anniversary in 2018, has expanded globally and now operates 582 subsidiaries and 87 associated companies worldwide, recording consolidated net sales of 8.003 trillion yen for the year ended March 31, 2019. Committed to pursuing new value through innovation across divisional lines, the company uses its technologies to create a better life and a better world for its customers. To learn more about Panasonic: <https://www.panasonic.com/global>.

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