

October 28, 2022

Kao Corporation  
MILIZE Inc.

## Kao and MILIZE Agree to Cooperate on Developing an “AI Health Visualization Tool”

### —Utilization of “Virtual Human Body Generative Model” to Encourage Behavior Modification that Leads to Health—

Kao Corporation (Head Office: Chuo-ku, Tokyo; President and CEO: Yoshihiro Hasebe, “Kao”) and MILIZE Inc. (Head Office: Minato-ku, Tokyo, President and CEO: Toru Tanaka, “MILIZE”) agreed to launch the new project that both commit to run Kao’s “Virtual Human Body Generative Model” on the MILIZE’s developing “AI Health Visualization Tool”. The tool, slated to be released in 2023, estimates and visualizes the future medical expenses and encourages behavior modification for the sake of satisfying increasing desire of staying healthy for long.

#### ■ AI Health Visualization Tool (by MILIZE)

- The tool converts health status and behavior information into monetary values and display them. It estimates future medical expenses based on health check data and information of behavior and physical conditions related to daily health data (such as the number of steps, body weight, sleeping hours, amount of exercise, intake of healthy food, and changes in lifestyle) input by the user.
- Taking advantages of Kao’s Virtual Human Body Generative Model, the tool estimates health items, possibly related to diseases, from various behaviors, habits, and physical conditions<sup>\*1</sup>. It utilizes these data for daily encouraging behavior modification to help the user maintain healthful habits and improve their physical factors that may cause diseases. By regularly collecting data of health status and lifestyle, the tool can advise personally for the user’s better behavior and lead to better health, as well as estimate more precisely future medical expenses.
- The tool can also be used for the employee health cares of more corporations and enterprises. Checking health data, simply inputting data of employee, and visualizing the estimated health conditions of employees, will help improve employee's health and reduce medical expenses in the future. MILIZE is to add to the tool the functions of “milizePro,”<sup>\*2</sup> its financial life plan simulator service for corporate customers and occupational fields.
- The service is to be offered, via API, to companies with employee health data and those providing healthcare applications and web services.

\*1 The estimated values are reference values, which are on a different scale from values measured by medical devices.

Neither AI Health Visualization Tool nor Virtual Human Body Generative Model is a medical device. They are not intended to be used medical purposes such as the diagnosis, treatment or prevention of diseases.

\*2 milizePro website: <https://milize.net/milizepro#feature>



Screen images of AI Health Visualization Tool

■ Virtual Human Body Generative Model\*3 by Kao

This statistical model, co-developed by Kao and Preferred Networks, Inc., covers a comprehensive set of over 1,600 attributes related to the body obtained by health checks, lifestyles (diet, exercise, sleep), and daily keenly interested topics such as personality traits, preferences, stress and menstruation, and provides these attribute patterns. Inputting data enables the model to statistically estimate extrapolated data of other items. Third-party developers can freely define input and output data points.

\*3 Kao News Release (Feb. 28, 2022): Kao and PFN Co-Develop Virtual Human Body Generative Model  
<https://www.kao.com/global/en/news/business-finance/2022/20220228-001/>

## Comprehensive set of over 1,600 attributes

**physical build, physical composition**

**blood test results**

**cognitive function**

**immune measures**

**hand surface infection barrier function**

**sugar metabolism**

**sebum-RNA**

**Age, sex**

**motor function**

**skin condition**

**hair condition**

**hair loss**

**menstruation (PMS/PMDD)**

**Personality traits**

**sleep**

**feeling of happiness**

**menopause**

**mental health status/depression**

**stress / fatigue**

**productivity**

**diet/nutrition**

**scalp microbiome**

**gut biome**

**body odor**

**overreactive bladder**

## ■ Overview of Kao Corporation

Name: Kao Corporation

URL: <https://www.kao.com/global/en/>

Address: 14-10, Nihonbashi Kayabacho 1-chome, Chuo-ku, Tokyo 103-8210

Founded: May 21, 1940 (Established: June 19, 1887)

Representative: Yoshihiro Hasebe, President and CEO

Business:

- Consumer products business in Hygiene & Living Care, Health & Beauty Care, Life Care, and Cosmetics
- Chemical business that meets the needs of the industry

## ■ Overview of MILIZE Inc.

Name: MILIZE Inc.

URL: <https://milize.co.jp/>

Address: Canal Gate Shibaura Building 6F, 12-38, Shibaura 4-chome, Minato-ku, Tokyo 108-0023

Founded: April 2009

Representative: Toru Tanaka, President and CEO

Business:

- Development of AI driven financial products and market analysis systems with advanced financial engineering technology
- Sophisticated machine learning driven investment management, risk management, and forecasting
- Established MILIZE Life Plan, and an integrated life plan simulator
- Consulting on IT, digital conversion, and big data processing with affluent enhanced artificial intelligence experiences