



KONICA MINOLTA

News Release

Konica Minolta's R&D Team of EXplainable KANSEI, a Design Analysis Service, Wins the Best Paper Award at IoTAI 2024, an International Conference on IoT-AI Evaluated for Outstanding Innovativeness, Including Integration of AI and Brain Science

Tokyo (October 24 2024) - Konica Minolta, Inc. (Konica Minolta) announced that "brand identity analysis technology through the integration of AI and neuroscience," which was developed by R&D team in charge of development of EXplainable KANSEI ("EX KANSEI"), a design analysis service offered by the Professional Print Business, has won the Best Paper Award at IoTAI 2024, an international conference renowned in the fields of IoT and AI, in the category of "AI-based prediction models - Marketing."

IoTAI is an international conference on the integration and application of the Internet of Things (IoT) and artificial intelligence (AI) and covers a wide range of topics, including basic research and social implementation of AI.

At IoTAI 2024, a technology under consideration to upgrade EX KANSEI was selected as the most innovative and influential research among research presentations. The following comment was received from the screening members: "The core idea presented in the paper is great. If proven out, it could help augment focus groups with AI agents. It could also be a good gating mechanism for brands to decide whether to put out a new change or not."



Konica Minolta's EX KANSEI is an online service to analyze and visualize human sensitivity to design and conduct quantitative analysis based on a technology that integrates Kansei Brain Engineering with Konica Minolta's proprietary imaging analysis. It optimizes paper media, including packages and promotional items, space designs, including stores and exhibitions and designs of websites and videos, to encourage purchasing activities. EX KANSEI has already been introduced by more than 150

companies, including consumer goods manufacturers, printing companies, and design companies.

Implementation of the content of this paper in EX KANSEI will further expand the value of services made available to customer companies for their marketing activities. For example, by combining the results obtained by AI learning of a huge amount of data related to the brand image of a certain brand and its competitor brands with the results of quantitative analysis of the characteristics of the brand's product package, it becomes possible to visualize the differences of the image from competitors' brands based on numerical values. By using these results, a more effective package design can be realized to create a target brand image.

Overview of the Award-Winning Paper

Title:

Deciphering Brand Identity from package: Visual Feature Analysis through Convolutional Neural Networks

Category in which Konica Minolta won the award:

AI-based prediction models - Marketing

URL:

https://www.thinkmind.org/library/IoTAI/IoTAI_2024/iotai_2024_1_40_20015.html

Award winners:

Shoichi Uratani, Group Leader, and Asaya Shimojo

Science of Sales Group, Business Development Division, Marketing Operations, Professional Print Business Headquarters, Konica Minolta, Inc.

Technological Innovativeness

EX KANSEI technology was highly evaluated for its outstanding innovativeness on the following points:

1. Integration of AI and brain science: Succeeded in scientifically elucidating consumers' subconscious reaction, which could not be determined by conventional techniques, through the combination of cutting-edge deep learning technology with the expertise of brain science
2. Quantification of brand identity: Made it possible to objectively express the brand identity, which had relied solely on qualitative evaluation, as numerical data
3. Pursuit of both science and business: Showcased both advanced scientific value and immediate applicability in the industry

Konica Minolta has been working on five material issues, including "Improving Fulfillment in Work and Corporate Dynamism" and "Supporting Healthy, High-Quality Living," through its business. Based on business activities that take full advantage of innovative proprietary technologies, Konica Minolta will contribute to improving the productivity of diverse companies and value proposition to customers, and will aim to realize a sustainable and affluent society.

*Explainable KANSEI is a trademark of Konica Minolta.

###