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NEC

MACROMILL
a Macromill Group company

March 8, 2019

Press Release

NEC Corporation
Macromill, Inc.

NEC and Macromill launch consumer insight marketing business using AI

~Discovering consumer insight with AI, Data and Biometric Information~

NEC Corporation and Macromill, Inc. today announced that they have jointly developed consumer insight marketing services using AI and biometric information and will launch services from April 2019. The services include a Central Location Test using biometric information and a consumer purchase prediction service using AI. They will be delivered together with 'D-Profile', an AI analytics service which launched in January 2019.

These services will help marketers to understand deep consumer needs and discover new insights by analyzing Macromill's various consumer data sets. This data includes attribute information such as age, gender, purchase history and access log, as well as EEG, line-of-sight (from NEC's portfolio of AI technologies, 'NEC the WISE'– see Note 1) and others.

These services allow marketers to utilize deeper consumer insight for marketing and product development. Marketers can now access consumers' unconscious reactions and activity logs - information which cannot be identified from surveys or a Central Location Test.

NEC and Macromill began their collaboration in consumer data utilization in April 2018. Since then, they have jointly developed marketing solutions for leading-edge companies.

The AI analytics service D-Profile, which utilizes dotData (Note 2), is already successfully providing new insights in media planning and product development for clients in the finance, FMCG, and media sectors.

For more information on D-Profile:
URL https://www.macromill.com/service/d-profile.html

NEC and Macromill will also jointly develop a service to provide insights based on in-store purchase behavior. The two companies are currently working on business development with real store trials, aiming to launch the service before the end of the fiscal year 2019.

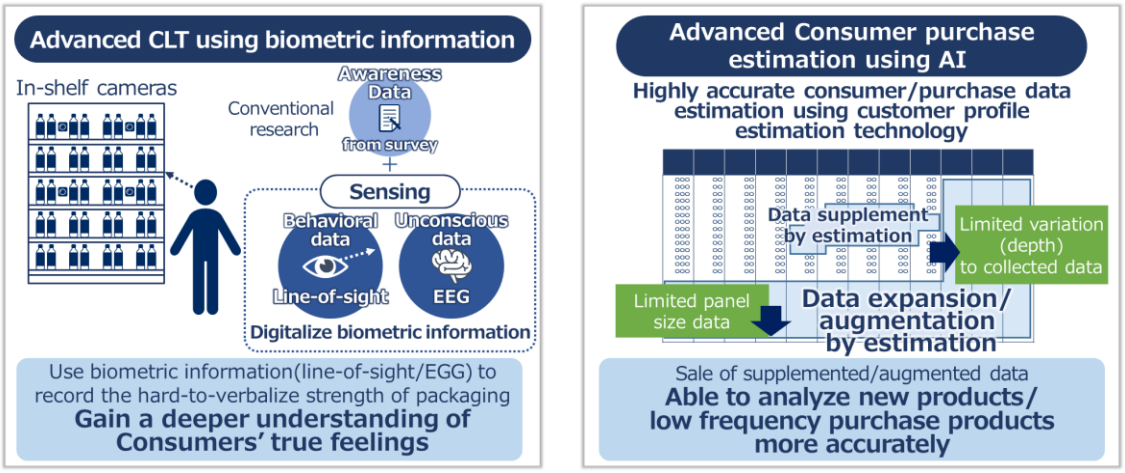
“Through this collaboration, NEC and Macromill seek to create a society where each consumer can benefit from more tailored services and pursue a richer life,” said Osamu Fujikawa, Senior Vice President, NEC Corporation. “We believe that by providing data and analytics that reflect consumer trends and values, our clients can better customize their marketing activities. In addition, we can support our clients’ efforts to own and utilize their proprietary data through safe data distribution.”

“ Macromill helps to solve marketing challenges by collecting and analyzing consumer data to deliver deeper insights into consumers - in the real and increasingly digital world,” said Toru Sasaki, Representative Executive Officer, Japan Operation, Macromill. “What’s so exciting about this collaboration is that we will be able to provide more refined insight into consumer activities enabling our clients to customize their marketing to their exact needs.”

Background

As consumer behavior becomes more diversified and individualized, it has become increasingly important for marketers to develop a deeper understanding of that behavior. Conventionally, only a limited range of consumer attribute data, such as gender, age, survey data and purchase behavior data were available, making it difficult to understand consumer behavior. Also, as the cost of data collection has risen, there has been a growing need among enterprises to access more existing data.

These jointly developed services will provide invaluable data for our clients' marketing activities, enabling them to increase their analytical capability by augmenting data with a high level of accuracy. Using AI means we can deliver the quantity of data required for analysis and improve data quality by using biometric information, such as line-of-sight and EEG.



Outline of New Services

About the New Services

1. Central Location Test service using biometric information

This service measures bio-reaction quantitatively by utilizing NEC's AI technology-'Remote Gaze Detection technology'(Note 3) and/or Centan Inc.'s (Note 4) 'EEG Monitoring Technology' (Note 5) at Macromill's CLT (Central Location Test) facility. This service offers a virtual shelf test

and an individual package test.

The virtual shelf test enables clients to evaluate new products in a more natural environment using a recreated store shelf without needing to wear eye-tracking devices. The individual package test combines eye-tracking and EEG to test new products and indicates positive/negative responses for each design element. By using these surveys, marketers can evaluate the degree of engagement required to attract consumers with both eye-tracking and psychological effects.

A verification test was added in September 2018. This has been proven to measure consumers' real reactions during the product selection process, such as "Which part of a product did you see first?" "Which other products did you compare against?" and "Was that negative or positive?" Conventional methods are unable to provide this level of detail.

Service launch: July 2019 (plan)
Service content:

- Virtual Shelf Test:

A numerical table that indicates visibility, the number of seconds of visibility, etc. for each product on a shelf

- Individual Package Test

Eye-tracking/EEG reaction heat map overlaid on package design

2. Consumer purchase prediction service using AI

This service provides data by using NEC's 'Customer Profile Estimation' (Note 6) AI technology to supplement shortages in Macromill's consumer data (purchase data), augmenting to a scale of approximately 100,000 consumers (Note 7). This service is useful for analysis of new products with a low volume of purchases, and low-frequency purchase products, or DMP (Data Management Platform) data analysis with multiple proprietary data combined, where the

purchase panel is insufficient for analysis. With purchase as the starting point, this service helps marketers to understand consumers, to plan advertisements, and to identify DMP building needs.

Service launch: April 2019 (plan)
Service content: A set of consumer purchase data predicted by AI technology

(Note1) NEC the WISE

'NEC the WISE' is NEC's portfolio of AI technologies.
・Press release: NEC announces new AI technology brand, "NEC the WISE"
https://www.nec.com/en/press/201607/global_20160719_01.html

(Note 2) dotData :

- dotData is an analytics software that automates data analysis.
  Press release: "Disrupting data science with artificial intelligence NEC establishes a startup in Silicon Valley for automating data analytics" (April 26, 2018)
  https://www.nec.com/en/press/201804/global_20180426_01.html
  * NEC obtained an exclusive license from dotData Inc. to provide this software in Japan.
- dotData
  https://www.nec.com/en/global/solutions/dotdata/index.html
- dotData,Inc.
  https://dotdata.com/

(Note 3) Remote Gaze Detection:
A technology that remotely detects eye-tracking in real-time with high accuracy
URL: https://www.nec.com/en/press/201612/global_20161216_01.html

(Note 4) Centan Inc.:
Centan is a Macromill Group company that provides marketing consulting services based on neuroscience and psychology.
(CEO: Takanobu Tanaka, office located in Minato-ku, Tokyo)

(Note 5) EEG Monitoring Technology measures bio-reactions such as EEG in real-time

(Note 6) Customer Profile Estimation Technology:

Based on NEC's unique relationship mining technology, it estimates detailed profiles on individual customers completely automatically and with a high degree of precision from basic profile information and purchase history. With this technology, marketers can respond to lifestyles that change from moment to moment, quickly discover true "individualized" needs that may have been overlooked and devise appropriate measures.
URL: https://www.nec.com/en/press/201609/global_20160902_02.html

(Note 7) Approximate scale of 100,000 consumers:
In addition to Macromill's MHS (approximately 20,000 panelists), this service can increase to a scale of approximately 100,000 consumers' purchase data with an estimated data augmentation of 80,000 panelists.

About NEC Corporation

NEC Corporation is a leader in the integration of IT and network technologies that benefit businesses and people around the world. The NEC Group globally provides "Solutions for Society" that promote the security, safety, efficiency and fairness of society. Under the company's corporate message of "Orchestrating a brighter world," NEC aims to help solve a wide range of challenging issues and to create new social value for the changing world of tomorrow. For more information, visit NEC at http://www.nec.com.

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About Macromill

Macromill is a rapidly growing global marketing research and digital marketing solutions provider. We bring together the collective power of our specialist companies to provide innovative data and insights that drive clients' smarter decisions. Macromill's industry-leading digital research solutions deliver rapid and cost-effective solutions to the challenges businesses face today. Headquartered in Tokyo with over

40 offices across the Americas, EMEA and Asia, Macromill serves more than 4,000 brands and agencies in more than 90 countries with over 2,200 experts worldwide.

Macromill Group companies include: Macromill, Inc., Dentsu Macromill Insight, Inc., M-Cube, Inc., M-Promo, Inc., Macromill Carenet, Inc., Macromill Embrain Co., Ltd., MetrixLab B.V., Oxyme B.V., Precision Sample, LLC, Centan Inc. and H.M. Marketing Research, Inc. For more information, please visit our Macromill Group website https://group.macromill.com

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