

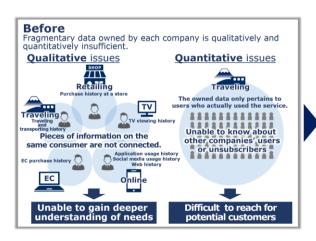


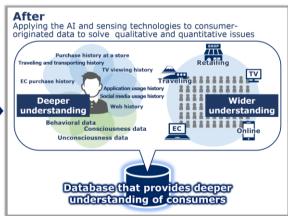
# NEC and Macromill jointly develop advanced marketing solutions using AI

**Tokyo, June 12, 2018** - <u>NEC Corporation</u> (NEC; TSE: 6701) and Macromill, Inc. (Macromill; TSE: 3978), a leading marketing research company, today announced the launch of an advanced data utilization collaboration that maximizes artificial intelligence (AI) to help companies execute highly sophisticated marketing activities.

In April 2018 these two market leaders began jointly developing advanced marketing solutions to help companies gain deeper insights into consumer behavior. This has been carried out by leveraging NEC's wide range of cutting-edge AI technologies, 'NEC the WISE,' (\*1) and Macromill's panel networks of more than 90 million people in 90 countries to aid consumer understanding.

Aiming to launch services in 2019, the two companies so far have developed demonstration experiments that focus on two key points. Firstly, the expansion of consumer data using Customer Profile Estimation Technology (CPET) (\*2) that compensates for data gaps using NEC's AI techniques. Secondly, an analysis of consumer preferences utilizing NEC's Remote Gaze Detection Technology (RGDT) (\*3), which detects the points that attract a consumer's eyes, and the duration of their gaze.





Through their partnership, NEC and Macromill will help clients improve their marketing activities. This in turn will provide a better experience for the end consumer. They will do this by enabling companies to:

# 1. Develop more accurate marketing campaigns through consumer data expansion

Macromill's consumer data will be expanded, and any gaps in the data will be compensated for using NEC's CPET and by leveraging existing consumer profiles and purchase data. By estimating and expanding data sources, NEC and Macromill will provide the information and insights companies need to develop more precise marketing activities.

# 2. Gain a deeper understanding of consumers' preference tendencies

NEC's sensing technologies such as RGDT, will be combined with Macromill's on-site research solution CLT (\*4) to detect the line-of-sight of survey participants. This will allow marketers to undertake a more rigorous analysis of consumer preferences compared to data obtained from questionnaires only. In addition, the integration of the power of factual data obtained from Macromill's electroencephalographic (EEG) data analysis (\*5) and subjective awareness survey results will give companies a far deeper understanding of consumer needs than is currently possible.

## 3. Enable sophisticated marketing activities for everyone

The extensive consumer data owned by Macromill and NEC's "dotData – Predictive Analytics Automation (DPAA)" (\*6) will allow for more sophisticated corporate marketing activities. The partners will provide precise data analysis support to companies that already own marketing data as well as those without it. This resource means any company can optimize their marketing activities - even if they don't generate their own data.

"NEC has a long and proven heritage in the development of cutting-edge artificial intelligence tools. Our face recognition technology boasts the world's highest precision scores (\*7) while 'dotData – Predictive Analytics Automation' simplifies the entire data analysis process" said Osamu Fujikawa, Senior Vice President, NEC Corporation. "This collaboration with Macromill will give companies access to the sophisticated and detailed data and analysis they need to create winning marketing campaigns. In today's competitive environment, that means promotional activities that truly reflect consumer behavior and preferences."

"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, 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."

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#### Notes:

\*1) NEC the WISE: NEC's cutting-edge portfolio of AI technologies.

Press release: NEC announces new AI technology brand, "NEC the WISE" http://www.nec.com/en/press/201607/global\_20160719\_01.html

NEC's AI Research http://www.nec.com/en/global/rd/crl/ai/index.html

- \*2) NEC Develops Al-based Customer Profile Estimation Technology https://www.nec.com/en/press/201609/global 20160902 02.html
- \*3) NEC technology knows where you are looking https://www.nec.com/en/press/201612/global 20161216 01.html
- \*4) Central Location Test (CLT)

  Survey and tests carried out with panel members at secured on-site environment.
- \*5) Electroencephalographic data analysis technology:
  In addition to subjective assessments by questionnaires and interviews, this method involves experiments that measure the biological reactions of consumers looking at products, such as their brainwaves, heart rate and line-of-sight, in real time and detects changes in their reactions, aiming to gain deeper insights into areas about which even consumers themselves are unaware.
- \*6) dotData Predictive Analytics Automation:

  NEC establishes a startup in Silicon Valley for automating data analytics

  https://www.nec.com/en/press/201804/global 20180426 01.html
  - \*NEC will obtain an exclusive license from dotData Inc. to provide this software in Japan.

About dotData https://www.nec.com/en/global/solutions/dotdata/index.html

\*7) NEC's Video Face Recognition Technology Ranks First in NIST Testing https://www.nec.com/en/press/201703/global 20170316 01.html

# **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 <a href="http://www.nec.com">http://www.nec.com</a>.

# **Orchestrating a brighter world**

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#### About Macromill, Inc.

We are a rapidly growing global market 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. Our industry-leading digital research solutions deliver rapid and cost-effective solutions to the challenges businesses face today. We are headquartered in Tokyo and Rotterdam with over 30 offices across the Americas, EMEA and Asia. Macromill serves more than 3,800 brands and agencies in more than 90 countries with over 1,800 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. and Centan, Inc. For more information, please visit our Macromill Group website https://group.macromill.com

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