

FOR IMMEDIATE RELEASE

“Happiness App” Proved to Improve Vertical, Horizontal, and Diagonal Communication at Workplace, Aiming to Lower Mental Health Risks

Tokyo, August 9, 2022 – Happiness Planet, Ltd. (“Happiness Planet”) and Hitachi, Ltd. (“Hitachi”) have proven that “Happiness Planet Gym,”^{*1} an application service offered by Happiness Planet to support organizational management, was effective in improving communication among employees, which affects the risks of mental illness, even for organizations where employees are working remotely and have little chance of seeing each other in person.

It is now clear that organizations with a high risk of mental illness tend to lack not only vertical communication between a manager and a subordinate but also horizontal and diagonal communication across the teams and/ or hierarchical levels^{*2}. Happiness Planet developed a function, “automatic formation of cheer-up teams,” capable of intentionally forming the “Triangular Connection” of vertical, horizontal, and diagonal communication. It is offered as one of the features of “Happiness Planet Gym” launched in May 2022. This feature automatically forms a team of three to four members who are vertically, horizontally, or diagonally connected with each other. Each member is encouraged by the app (a feature named “Happiness advisor”) to declare one’s positive goal for the day and send each other messages to cheer for other team members. (Figure 1)

Happiness Planet and Hitachi jointly conducted Proof of Concept (PoC) to verify the effectiveness of the automatic formation of cheer-up teams with an organization of about 250 employees, which was divided into two groups. First, members of both groups freely chose someone they would like to cheer for and sent supportive messages to the person for one month, and then communicative connections generated in each group were observed. Next, for the following one month, one group rooted for other members in the same manner, while the other group rooted for team members chosen by the automatic formation of cheer-up teams, and then changes in the communicative connections generated in each group were analyzed. Results showed that the communication structure of the group that continued to cheer for one another in the same manner remained almost unchanged, while in the other group that rooted for other members chosen by the feature, 33% of the members, who had previously tenuous connection with people around them, were able to establish a new “triangular connection”. (Figure 2)

These results raise the expectation that the feature may improve workplace communication and thus help reduce the risk of mental illness among employees.

Happiness Planet and Hitachi will continue to work together to accelerate initiatives for enhancing wellbeing of the society and endeavor to support people’s quality of life with data and technologies that fosters a sustainable society.

^{*1} For more information on “Happiness Planet Gym,” please see <https://happiness-planet.org/>

^{*2} For the results of the joint research on the association between depressive symptoms and communication structures in the workplace by Hitachi, Happiness Planet, and Tokyo Institute of Technology published in Scientific Reports published by Nature, see <https://www.nature.com/articles/s41598-022-14366-9> (published online on June 17, 2022). Lee, JH., Sato, N., Yano, K., Miyake, Y., Universal association between depressive symptoms and social-network structures in the workplace. Sci Rep 12, 10170 (2022).

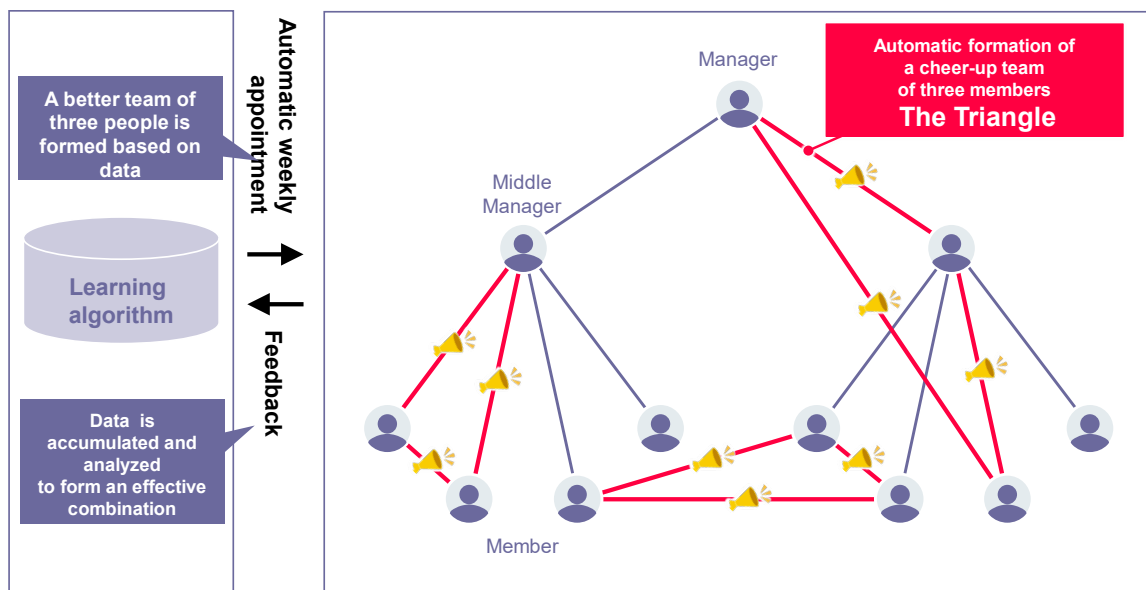
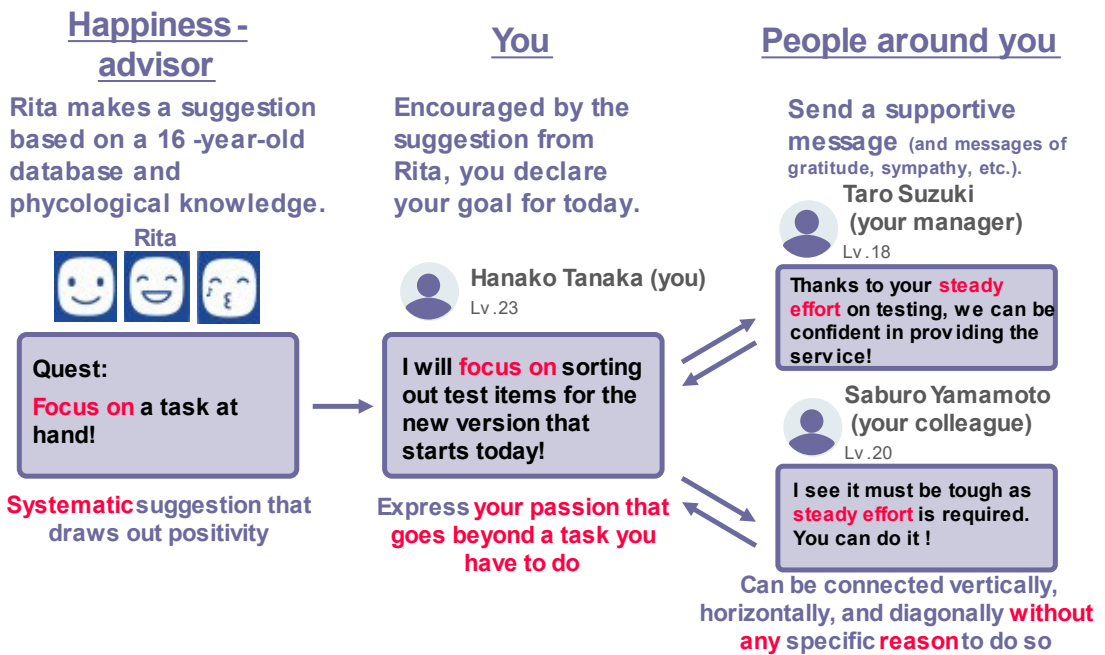


Figure 1 Automatic formation of cheer-up teams to form a “Triangular Connection” of communication

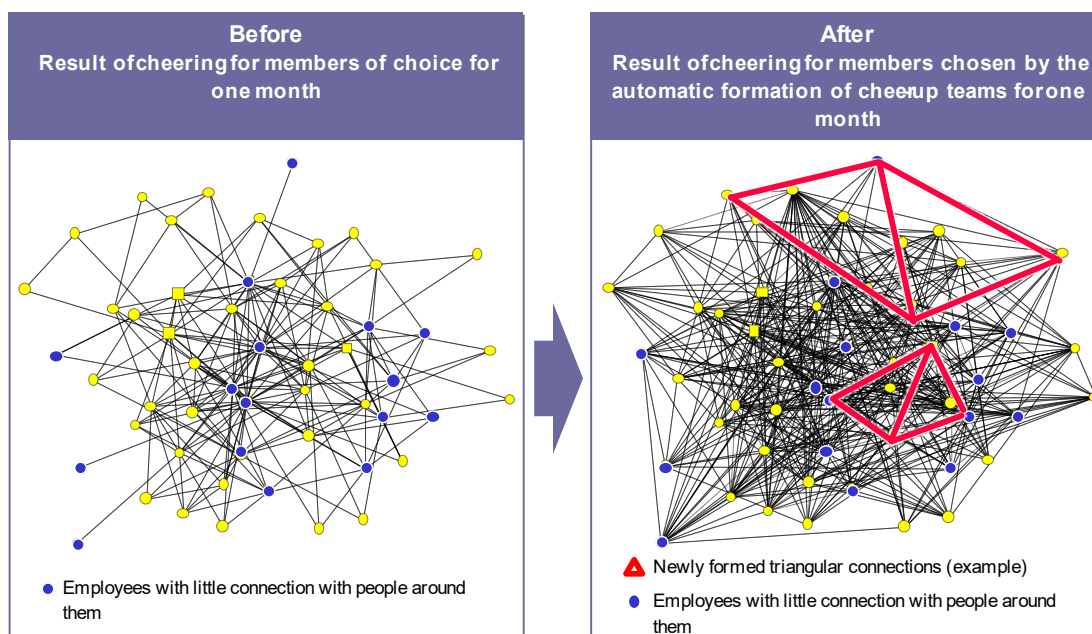


Figure 2 Change in social network structures brought by the automatic formation of cheer-up teams

Background

As more people are shifting to work remotely due to the COVID-19 pandemic, a good workplace communication has become a social challenge. It is said that communication limited via email and web conferencing is likely to increase the chance of employees feeling isolated without being horizontally and diagonally connected with other members of the workplace. This raises concern about a decline in engagement, harm to mental health, and increase in the rate of turnover.

To address this issue, Happiness Planet and Hitachi, in cooperation with Professor Yoshihiro Miyake of Tokyo Institute of Technology and his research team, conducted a questionnaire survey research (CES-D^{*3}) of 449 employees of 10 companies from different fields and types of businesses. The aim of the research was to find out not only about communication and physical activities but also depression and depressive symptoms and thereby analyze social network structures involving subjects experiencing depression or symptoms of depression. They found that there is no correlation between the symptoms of depression and the number interactions or colleagues that a subject regularly interacts with. But when there is no verbal communication between two colleagues to whom the subject often speaks, the subject tends to experience depression or depressive symptoms. Conversely, when such two colleagues often interact with each other at work, meaning there is the so-called “Triangular Connection”, the subject is likely to maintain good mental health. These findings were published in the British science magazine Nature / Scientific Reports in June 2022.

Based on these research results, Happiness Planet developed “Happiness Planet Gym” featuring the “automatic formation of cheer-up teams,” used in this PoC, designed to promote the formation of the “Triangular Connections” in the workplace.

^{*3} CES-D (Center for Epidemiologic Studies Depression Scale): A measure developed by the National Institute of Mental Health of the U.S. People can self-assess their state of depression by answering a total of 20 questions about happiness, concentration, good condition, hope, good sleep, conversation, obsession, appetite, depressed feeling, effort, anxiety, loneliness, sadness, and so on that they experienced over the past week.

- End -

About Happiness Planet, Ltd.

Happiness Planet provides software service intended to enhance happiness among individuals and organizations. It was founded in July 2020 as a new company based on “Dejima” approach with its high degree of independence and openness, which aims to create new industries with technology for visualizing happiness. The company was established with a capital of 990 million yen, and its leading stockholder is Hitachi. Drawing on results of its research and development for measuring and analyzing of a sense of happiness and communication in the workplace with smartphones and wearable devices, the company aims to provide support in building an organization where employees are motivated to act positively to help achieve corporate mission. In the fiscal year 2022, the company launched a SaaS service called “Happiness Planet Gym” that can enhance a positive frame of mind and psychological safety for each and every employee based on wellbeing-related data and scientific knowledge.

For more information, see the website: <https://happiness-planet.org/>

About Hitachi, Ltd.

Hitachi drives Social Innovation Business, creating a sustainable society with data and technology. We will solve customers' and society's challenges with Lumada solutions leveraging IT, OT (Operational Technology) and products, under the business structure of Digital Systems & Services, Green Energy & Mobility, Connective Industries and Automotive Systems. Driven by green, digital, and innovation, we aim for growth through collaboration with our customers. The company's consolidated revenues for fiscal year 2021 (ended March 31, 2022) totaled 10,264.6 billion yen (\$84,136 million USD), with 853 consolidated subsidiaries and approximately 370,000 employees worldwide. For more information on Hitachi, please visit the company's website at <https://www.hitachi.com>.

Contacts

For more information, use the enquiry form below to contact the Research & Development Group, Hitachi, Ltd. Please make sure to include the title of the article.

<https://www8.hitachi.co.jp/inquiry/hqrd/news/en/form.jsp>

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
