

FOR IMMEDIATE RELEASE

## Hitachi Develops Technology to Automatically Create Effective Advice to Increase Worker Happiness Using Artificial Intelligence

*Hitachi initiates internal trial with 600 participants from sales & marketing*



Name tag type wearable sensor



Image of workers wearing sensors

Tokyo, June 27, 2016 --- Hitachi, Ltd. (TSE:6501; “Hitachi”) today announced the development of technology using artificial intelligence that automatically creates effective advice for raising the happiness of workers based on the behavioral data of each individual on a daily basis and the commencement of an internal trial with 600 participants from sales & marketing. More precisely, a name tag type wearable sensor collects the massive amount of individual behavioral data which is then analyzed using Hitachi AI\*<sup>1</sup> Technology/H (hereafter referred to as H), and used to create and deliver personalized advice on actions automatically, such as on communication in the workplace or time allocation that will contribute to raising individual happiness. This advice is delivered daily, and individual workers can check the daily advice on their smartphone or tablet, and choose to apply the advice in their daily activity.

Hitachi will integrate the results from this trial into the solution which it will provide to corporate and other organizations globally, to support increased productivity through a more active organization resulting from the increased happiness of workers.

In recent years, increasing “happiness” has become one of society’s most important issues. In the corporate environment, a new style of management that will leverage the individuality and strengths of each employee to achieve even greater productivity is being sought. Hitachi focused on and has been researching the inter-relationship of individual and organizational activity levels, sense of happiness and productivity.

In 2015, Hitachi developed measurement technology to determine the organizational

activity level and happiness level strongly related to organizational productivity from behavioral data (distinctive patterns in physical movements) gathered by the wearable sensors. Hitachi also launched a service to resolve corporate management issues using the newly developed H, and has conducted trials or delivered systems on the theme of increasing organizational activity level and happiness level to 13 customers, including The Bank of Tokyo-Mitsubishi UFJ, Ltd. and Japan Airlines Co., Ltd. Through the trials conducted at a call center which showed a 34% increase in sales on days where the “average happiness level” of workers were higher compared to “low average happiness level” days, Hitachi has shown that individual and organizational activity level and happiness level heavily influence productivity, and have been applying the technology to various industries and workplaces.

For the new solution, Hitachi developed technology to create and deliver individually customized effective advice on a daily basis to raise the happiness of individual workers by segmenting the data collected through the wearable sensors for time periods and counterpart in communications, and inputting the data to H.\*2 The user is able to confirm each day on their smartphone or tablet, personalized suggestions regarding communication in the workplace or time allocation such as “Let’s try increasing short conversations (less than 5 minutes) with A” or “Mornings are better to meet with your boss, B”. By working on this advice, the happiness level of the individual increases, and with that, productivity is expected to increase. In consideration of privacy, the data is managed in a way that others cannot view an individual’s data\*3.

Smartphone display example (Advice and behavior log)



Through the internal trial with 600 sales & marketing personnel, Hitachi will be verifying the effectiveness of the solution and any operational issues. Further, Hitachi will integrate the results from this trial into the solution and will accelerate the provision of services using H as a core technology including this newly developed service, to support increased productivity through a more active organization resulting from the increased happiness of workers.

Notes \*1 AI: Artificial Intelligence

\*2 This technology measures the “average happiness level” of the individual and nearby team members and automatically provides individualized advice to raise the “average happiness level.” It does not measure the “happiness level” of the individual.

\*3 Individual behavioral data is anonymized and used in a way that cannot identify the individual, however the individual is able to view their own data.

### **About Hitachi, Ltd.**

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, delivers innovations that answer society’s challenges. The company’s consolidated revenues for fiscal 2015 (ended March 31, 2016) totaled 10,034.3 billion yen (\$88.8 billion). The Hitachi Group is a global leader in the Social Innovation Business, and it has approximately 335,000 employees worldwide. Through collaborative creation, Hitachi is providing solutions to customers in a broad range of sectors, including Power / Energy, Industry / Distribution / Water, Urban Development, and Finance / Government & Public / Healthcare. For more information on Hitachi, please visit the company’s website at <http://www.hitachi.com>.

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