FOR IMMEDIATE RELEASE

Business Microscope identifies key factors affecting Call Center performance

- Activity-level during breaks influenced order volume -

Tokyo, July 17, 2012 - Hitachi, Ltd. (TSE:6501, "Hitachi") and MOSHI MOSHI HOTLINE, Inc., today announced that after measuring the behavior of telemarketers in call centers over a one-month period, and analyzing the data, a correlation was found between sales performance over the phone and the activity level during breaks in the workplace. To confirm these findings, a similar analysis was conducted with teams of telemarketers from the same age group in which higher workplace activity levels(1) might be expected. The result showed that not only was there a higher level of workplace activity, but also a 13% increase in the volume of orders received. These results indicate that by analyzing employee behavioral data in conjunction with management and business data, factors affecting the performance of firms can be identified and could suggest new strategies to boost business performance.

Using the "*Business Microscope*"(2) behavior measurement system, Hitachi has measured human behavior over a million days and accumulated a big data set consisting of over ten trillion data items, for development of technologies to analyze human behavioral data. Employing wearable sensor badges with embedded infrared sensors and accelerometer sensor, the "sociometric" badge captures for analysis a wide range of data such as who met whom, when, for how long, and a host of other physical activities. To illustrate the practical benefits of the system, Hitachi has worked together with customers and partners to identify factors affecting business performance, and applied that knowledge to enhancing the performance of the firms. For example, in this collaborative project with MOSHI MOSHI HOTLINE, Inc., the *Business Microscope* was successfully applied in identifying a key factor affecting the number of phone orders received by telemarketers at call centers. The experimental trial revealed a causal relationship between number of orders received and the activity level in the workplace during breaks, and this connection was used to actually boost the performance of the call centers. Details of the analysis are as given below.

(1) Comparative Analysis of Behavioral Data and Performance Data

Measurement was conducted over a one-month period in two domestic call centers (one with 51 telemarketers, and the other with 79 telemarketers). Data was collected on (a) face-to-face interactions between telemarketers and supervisors, and (b) bodily movements of telemarketers, to derive information on the activity level of the workplace. This data was then analyzed to see if there was a correlation with the number of orders received per unit time ("order receipt rate"). Results indicated that the primary factors influencing the volume of orders were (a) the degree of activity during breaks at the workplace (35%), (b) sales skill (21%), and (c) other factors (44%). This suggests that the activity level during breaks in the workplace has a greater impact on the difference and daily variations in order receipt rates between the two centers than sales skills. Further, there order receipt rate difference was about 40% between the two call centers, with the better performing call center also showing about 40% higher activity level during breaks than the other call center.

(2) Verification tests to improve order receipt rate

Next, the causal link between order receipt rate and workplace activity level during breaks was investigated. To elevate the activity level during breaks, a team was formed with four telemarketers of the same age group. Their work schedules were coordinated so that for three weeks they could take breaks at their own convenience and for one week their breaks coincided. The results confirmed that during the week when their breaks coincided, workplace activity level rose and order receipt rate also increased by approximately 13%. This supports the conclusion that raising the level of activeness during breaks is linked to an improvement in the number of orders received.

MOSHI MOSHI HOTLINE and Hitachi will continue to explore the relationship between call center performance and human behavior. Further, Hitachi will, together with customers and partners from various business sectors, continue the comprehensive analysis of vast behavior-related big data sets measured by *Business Microscope* coupled with more conventional management and business environment data to promote performance-enhancing consulting services and IT business solutions.

Notes

(1) workplace activity level:

Activity level is derived from body motion detected by the acceleration sensor embedded in the sociometric badge.

(2) Business Microscope:

A sociometric badge developed by the Central Research Laboratory of Hitachi, Ltd. The wearable electronic device features infrared sensors and a three-axis acceleration sensor to automatically measure face-to-face interaction, conversational time with other employees, body motion, and other body language activities. Business solutions involving this system are offered by Hitachi High-Technologies Corporation.

About MOSHI MOSHI HOTLINE, Inc.

MOSHI MOSHI HOTLINE INC (MHL) is a leading BPO (Business Process Outsourcing) service company established in 1987. The MHL group conducts BPO services related to customer contact points such as call center, back office, field sales support and Web marketing, with more than 20,000 employees in over 20 BPO centers across Japan, for clients in various industries including telecommunications, broadcasting, finance and public services.

About Hitachi, Ltd.

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, is a leading global electronics company with approximately 320,000 employees worldwide. Fiscal 2011 (ended March 31, 2012) consolidated revenues totaled 9,665 billion yen ($117.8 billion). Hitachi is focusing more than ever on the Social Innovation Business, which includes information and telecommunication systems, power systems, industrial, transportation and urban development systems, as well as the sophisticated materials and key devices that support them.

For more information on Hitachi, please visit the company's website at http://www.hitachi.com.

# # #

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.
