

**FOR IMMEDIATE RELEASE**

**Introducing "Operational Management Innovation Service", a Service that Improves the Utilization Rate of Factories, Plants, and Public Infrastructure Facilities, while also Achieving Cost Reductions**

*Fully Supporting the Formulation and Execution of business innovation plans by a Proprietary Operational Diagnostics Model, which Can Clarify the Areas that Need Operational Innovations and Advanced Big Data Utilization Related Technologies.*

**Tokyo, November 13, 2014** --- Hitachi Ltd. (TSE:6501) and Hitachi Consulting Co., Ltd., a Japanese subsidiary of Hitachi, have developed "Operational Management Innovation Service (OMIS)" which enables improved utilization of factory, plant and public infrastructure facilities, while also reducing associated operational and maintenance costs; the Companies plan to market the service to Japanese corporate clients starting November 14, 2014.

Specifically, an operational improvement consulting methodology has been implemented with over 500 clients outside of Japan by Hitachi Consulting Corporation, a US subsidiary of Hitachi. Dealing with Japanese clients, Hitachi and Hitachi Consulting Co., Ltd. have optimized the methodology and will collaboratively make use this new methodology for their consulting services. By combining a unique operational diagnostic model, which clarifies the operational areas that require improvement, with advanced big data utilization related technologies, such as Business Dynamics<sup>(1)</sup> and fault prediction diagnostic tools, Hitachi Consulting Co., Ltd. enables innovations in factory and plant Operational Management<sup>(2)</sup> from planning to implementation.

- (1) Business Dynamics: Originated at MIT (Massachusetts Institute of Technology), this technique quantitatively predicts the effects of new measures by modeling the business structure. Hitachi has abundant application track records in these techniques, and has the unique know-how to quickly and easily apply these techniques, and has templates for every type of industry.
- (2) Operational Management: The evaluation, analysis, and control of the relation of inputs (raw materials), operations (processing, treatments, etc.), and outputs (products) in order to achieve the highest efficiencies and the optimal production process.

In recent years, companies in manufacturing and resource development sectors have experienced structural changes such as shortage of skilled engineers who support

smooth operations of factories and plants, as well as increased diversity and complexity of machinery and equipment as companies seek to globalization activities. The need for innovations in business operational management is growing. In this context and with emergence of M2M<sup>(3)</sup> technologies and big data analytics, companies seeking to leverage the IT to better utilize plant and factory facilities, while also reducing operational and maintenance costs are increasing in number.

\*(3) M2M (Machine-to-Machine): The system by which machines exchange information directly with each other through a network without human intervention.

Hitachi Consulting Corporation has accumulated a significant track record of success over the past 25 years, by implementing a proprietary operational consulting methodology to over 500 companies overseas primarily in the manufacturing and resource development sector, including companies in the mining, petroleum, and gas industries. In addition, Hitachi combines knowledge from its customers and partners, with its own rich set of data analytical know-how, in order to provide the "Data Analytics Meister Service" since June 2012, creating new business value from big data, such as for business and social infrastructure, thereby supporting innovations on a wide and global scale. At the same time, the company has promoted the development of Hitachi's advanced big data utilization related technologies, products and services, including Business Dynamics.

With this as a background, Hitachi and Hitachi Consulting Co., Ltd. have fine-tuned an operational consulting methodology of Hitachi Consulting Corporation specifically for Japanese companies, and combined it with Hitachi's unique and advanced big data utilization technologies, in order to develop "OMIS", which is to be provided by Hitachi Consulting Co., Ltd. to Japanese companies with facility assets. Hitachi Consulting Co., Ltd. will holistically support the formulation and execution of operational innovation plans by identifying fundamental issues faced by clients; and by utilizing diagnostic tools that pinpoint areas needing improvement as well as data analytical tools that leverage newly developed Business Dynamics technology; thereby, improving the facility utilization while also reducing operational and maintenance costs, such that an optimization of return on investment can be achieved.

Hitachi has organized the product and the service portfolio in the smart information field as Intelligent Operations. "OMIS" is provided as a consulting service within Intelligent Operations, thereby supporting realization of innovations in companies and society at large.

## **Special Features of "OMIS"**

### **1. Integrated Support of Operational Management Innovation Plan from Formulation to Execution**

Integrated support is provided for an operational management innovation plan encompassing production planning, facilities investment and IT strategies. Specifically, these activities are divided into two phases: "Analysis and Planning", and "Innovation and Implementation".

In the "Analysis and Planning" phase, in accordance with the operational consulting methodology, overall assessment, conceptualization, policy formulation, and cost-benefit analysis are executed. An optimal operational management innovation plan can be crafted for each client by selecting the right mix of services among: diagnosis of the current state utilizing a proprietary diagnostic model; data analysis leveraging specialist "Data Analytics Meister" for big data utilization; M2M services; fault-predictive diagnostic services using machine learning technologies; ERP (Enterprise Resource Planning) system and EAM (Enterprise Asset Management) system.

In the "Innovation and Implementation" phase, execution of the formulated plan is fully supported, and worked to maximize return on investment by both the reduction of operations and maintenance costs and improving facilities utilization rate.

### **2. Fine-tuning Operational Consulting Methodology, already Implemented at 500 plus Companies Overseas, for Japanese Companies**

For the Japanese companies, Hitachi Consulting Co., Ltd. optimizes the new operational consulting methodology that was developed by Hitachi Consulting Corporation. This operational consulting methodology, as developed by Hitachi Consulting Corporation, has features, which applies diagnostic models to specific industries and objectives by quantitatively assessing current operational areas that can be improved. With a track record of over 500 overseas companies, the operational consulting methodology has been validated in a broad range of energy industries, such as oil and gas, as well as the metal, mining and chemical industries.

The main examples of application are as follows:

- (1) Companies conducting resource development, who seek to reduce operating and maintenance costs by \$ 30 million or more per annum.
- (2) Companies that manage chemical-based plants, while improving the productive capacity of the plants to a maximum of 32%, employment / maintenance costs are reduced 10% or more, and the rate of the yield is improved by 10 to 20%.

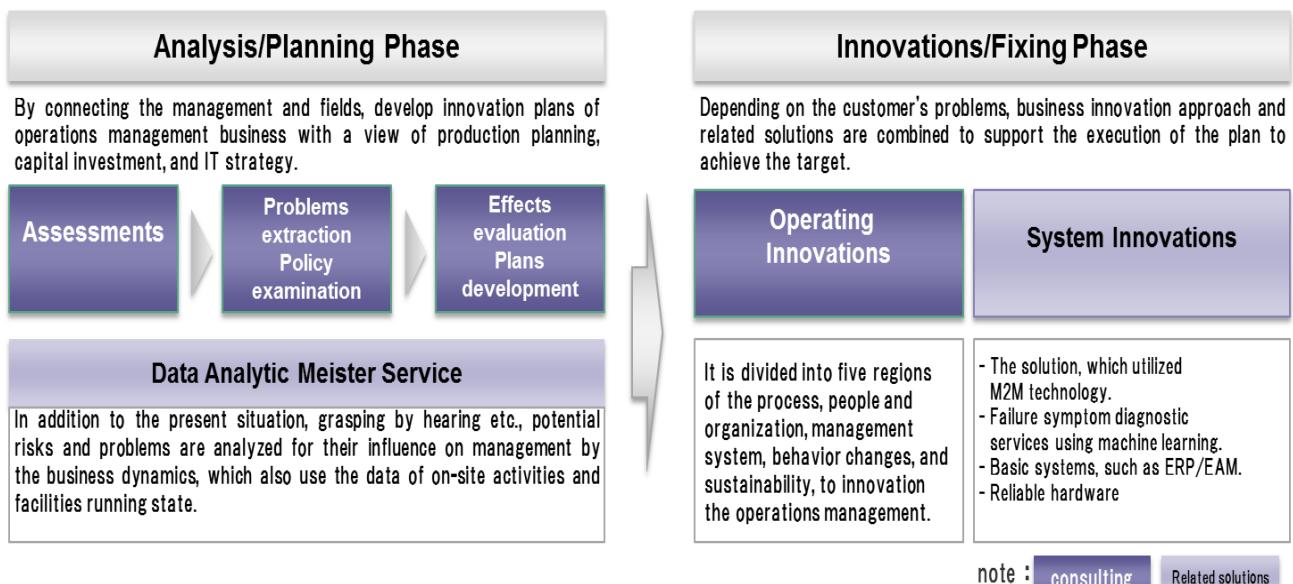
### 3. Quick and Precise Extraction of Essential Problems by Data Analysis Utilizing Business Dynamics, etc

In addition to an operational diagnosis of the current status based on a proprietary diagnostic model, "Data Analytics Meister" is capable of performing data analysis utilizing the Business Dynamics, where potential risks and issues and their impact on management are calculated; grasp of the current status, and identification of key issues are conducted on a widely diversified basis.

Business Dynamics is a technology, which quantitatively simulates the business and operational impact of implementing an improvement program by utilizing a structural business model marshaling voluminous operational data, while also assessing potential risks and important business issues. In addition to general interviewing techniques, Business Dynamics enables visualization of key performance indicators, as well as real-time on-site business data, where business impacts can be ascertained.

This newly developed technology, which accelerates the extraction of business subjects from a business structural model, has recently been shown to reduce analysis time by 60%, enabling our customers to make decisions more quickly.

#### Outline of "OMIS"



## **Related information**

Intelligent Operations (Smart information) Related Home Page

<http://www.hitachi.co.jp/smart-it/nr41113e/>

## **About Hitachi, Ltd.**

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, delivers innovations that answer society's challenges with our talented team and proven experience in global markets. The company's consolidated revenues for fiscal 2013 (ended March 31, 2014) totaled 9,616 billion yen (\$93.4 billion). Hitachi is focusing more than ever on the Social Innovation Business, which includes infrastructure systems, information & telecommunication systems, power systems, construction machinery, high functional materials & components, automotive systems, health care and others. For more information on Hitachi, please visit the company's website at <http://www.hitachi.com>.

## **Contacts**

Hitachi Big Data-Contact Form

<http://www.hitachi.co.jp/products/it/bigdata/contact.html>

Hitachi Consulting Co., Ltd

E-mail: [info@hitachiconsulting.co.jp](mailto:info@hitachiconsulting.co.jp)

# # #

---

**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.**

---