# **Business Strategy for IT Services Supporting Global Operations**

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# BUSINESS STRATEGY FOR IT SERVICES SUPPORTING GLOBAL OPERATIONS

## **Emergence of New Competition**

ALONG with information technology (IT) vendors such as International Business Machines Corporation (IBM), large electrical equipment manufacturers such as General Electric Company (GE) and Siemens AG are also entering the global IT market.

One aspect of the IT business strategy of GE is that it seeks to use productivity as a way to overcome issues facing society and to create customer value. This approach is described as the "power of 1%," meaning that improving a customer's assets by 1% leads to a significant increase in that customer's annual profit. This contribution to the growth market is called "innovation in society," and the way to achieve it is the Industrial Internet. Specifically, this strategy seeks

to improve productivity and reduce costs through the use of IT for integrated control of equipment at production plants.

The Industrie 4.0 project in Germany is another such initiative that seeks to optimize asset performance and operation through a fusion of operation technology (OT) and IT by standardizing the interfaces between equipment and IT used in the workplace at all steps, from issuing and receiving orders to production.

# Management Vision for Global IT Service Business

Hitachi has chosen a management strategy for its information & telecommunication systems business of "becoming a major global player through the 3Gs: growth, global, and group," and has set a target for overseas sales of making up 35% of its global business in 2015.

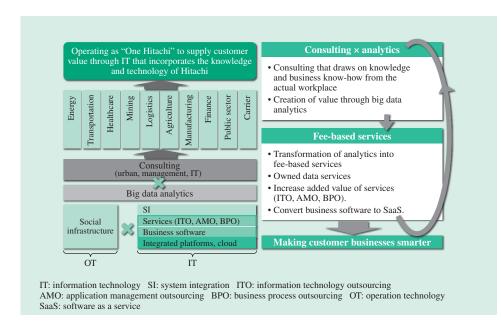


Fig. 1—Structure of Global IT Service Business.

The ultimate aim is to make customer businesses smarter through two core businesses: one that resolves customers' management issues through management consulting and big data analytics, and one that provides operational and other fee-based outsourcing services.

At the core of Hitachi's activities aimed at achieving this target is its Social Innovation Business. By drawing on strengths in both OT and IT that it has built up over its many years as a manufacturer, Hitachi is pursuing social innovations that can overcome a variety of challenges and problems facing society. Its aim is to achieve service innovation through the use of information, to carve out a global IT service business.

#### Two Core Global IT Service Businesses

Hitachi's global IT services are based around two core businesses. One solves customers' management challenges through management consulting and big data analytics. The other provides fee-based services as an outsourcing provider for business operations and other activities. The ultimate aim is to use these two different approaches to make customer businesses smarter (see Fig. 1). The following sections describe each of these businesses.

#### MANAGEMENT CONSULTING

#### **Solving Management Challenges**

Management consulting is a high-level form of business consulting that involves working alongside the customer's management team to understand the issues they genuinely wish to resolve, and proposing solutions. Because it provides business consulting at a high level, it acts as a starting point that leads to subsequent IT services, such as system integration (SI) and business operations. It is also intended as a way to increase business by acting as an incubator or integrator for supplying Hitachi solutions that overcome challenges.

Workplaces have a large number of problems and challenges that people want to resolve. However, because money and other management resources are finite, it is advisable to prioritize those problems and challenges that ought to be solved first.

In a cost reduction mission, for example, the workplace needs of different departments are often contradictory. This can result in mutually conflicting proposals, such as a system department wanting to adopt simpler systems to reduce maintenance costs while an operational department wants to expand the scope of system support to reduce the number of operational personnel. To resolve this conflict, it is necessary to identify the underlying problems and challenges and to implement solutions from a management perspective.

Accordingly, the management consulting provided by Hitachi Consulting Co., Ltd. identifies the genuine business issues from the customer's management perspective, and promotes the Social Innovation Business by proposing solutions.

### Global Operation as "One Hitachi"

The various solutions that management consulting supplies to resolve issues extend beyond IT to include other products, solutions, and services also offered by Hitachi.

Customer expectations for IT are undergoing a shift, from its use as a way of optimizing operations toward the use of data as a means of resolving business issues, with growing potential seen for IT that contributes to social innovation.

Solutions related to big data have been in demand recently, and in this field in particular, Hitachi is developing and supplying solutions for creating customer value, primarily through HGC-IA<sup>(a)</sup>.

This issue of *Hitachi Review* contains an article describing Hitachi's strategy for management consulting together with practical examples (see p. 18).

#### PROVIDING OPERATIONAL SERVICES

Attitudes toward IT are shifting away from ownership and toward renting. This has created a need for operational services that encompass entire information systems, and Hitachi is responding to this demand from society with outsourcing services for OT and IT, two of Hitachi's strengths. The following section gives an overview of these operational services.

# Managed Storage Service and Global Service Platform Businesses

Changes in the customer environment, such as the shift in demand from ownership to renting and rising concern about reducing IT asset and operating costs, are creating a need for higher added value in operational services.

To satisfy this demand, Hitachi supplies managed storage solutions (MSSs), an operational service that installs Hitachi-owned storage at customer sites and outsources storage operations to Hitachi (including products from other vendors).

## (a) HGC-IA

Abbreviation of Hitachi Global Center for Innovative Analytics. Hitachi established HGC-IA in 2013 as an organization dedicated to promoting big data analytics businesses throughout the world. It develops big data analytics solutions aimed at resolving issues faced by customers by linking sites in America, the UK, Asia, and elsewhere to bring together research and operational departments for the consolidation and sharing of personnel, technology, and development capabilities.

Whereas the focus in the past was on the supply and maintenance of storage products, an MSS expands the scope of the service to include system design, implementation, and operation of storage products in particular.

Furthermore, to expand the business into higher level operational services, Hitachi also supplies big data analytics platforms (global service platforms) designed for particular applications.

This issue contains an article about Hitachi's business strategy for MSSs and global service platforms (see p. 23).

# **Expansion of Services beyond Maintenance and Operation**

Hitachi Payment Services Pvt. Ltd. provides an automated teller machine (ATM) operation service for financial institutions in India. Its Independent ATM Deployment service makes up a large proportion of this business, and by combining this and other Hitachi solutions, Hitachi Payment Services is planning to further extend the services it offers and the range of industries it serves.

One measure being taken for expanding services is to enhance ATM operation, including working in collaboration with Hitachi-Omron Terminal Solutions, Corp. to integrate its supplied solutions, and making use of Hitachi-Omron Terminal Solutions' know-how for predicting transaction volume.

Another measure being taken is to integrate with payment solutions for different industries. The aim is to expand the business by using Hitachi Payment Services' payment service as a base and linking it together with other payment services belonging to Hitachi. Specifically, Hitachi aims to deploy advanced services globally through integration with electronic money in a transportation card solution and with a points management solution (see p. 27).

### **Smarter ATM Operation**

The number of ATMs operating in China has reached 200,000, similar to the number in Japan, and this growth trend is set to continue. However, this increase in the number of ATMs is also driving a relentless rise in the cost to banks of ATM operation, creating a major problem for bank management.

To solve this problem, Hitachi has developed its smart cash stream solutions. These include solutions for cash demand forecasting in order to make efficient use of money, and for route optimization to improve productivity for the filling of ATM cash cassettes.

These solutions are provided as an operations service in conjunction with ATM maintenance. An article in this issue describes the solutions and supporting technologies (see p. 32).

### **Expansion of IT Business Base in India**

Hitachi Systems, Ltd. established Hitachi Systems Micro Clinic Pvt. Ltd. (HISYS-MC) in India to expand its global business by establishing a presence in that country, which is recognized for the size of its market and its growth prospects.

While IT infrastructure services are currently the main business of HISYS-MC, it also intends to grow its business in the future by expanding the scope of its services to include data center monitoring and operation services and the outsourcing of security monitoring and operation, which are strengths of HISYS-MC (see p. 38).

# Marketing of Security Products to Europe and America and their Delivery as Services

Finger vein authentication is a proprietary technology developed by Hitachi, and is expanding in Japanese and overseas markets along with the growth of the security and biometric authentication market. Interest in biometric authentication is high among overseas financial institutions, particularly in Europe and America.

This issue contains an article about the technology and available solutions for finger vein authentication in the form of biometric authentication solutions, including examples of overseas applications.

In the future, Hitachi will proceed with establishing a business for the issuing (online and offline) and management of electronic signatures to offer comprehensive security operations in the form of a service based around finger vein authentication (see p. 43).

#### **Smarter Logistics**

Progress is being made in using big data to make logistics smarter, and Hitachi is engaged in such initiatives in China.

The cost of logistics as a proportion of gross domestic product (GDP) in the emerging economies of Asia is high, with an urgent need for efficiency improvements and ways of dealing with rapid increases in the volume of goods and rising service quality requirements.

In response to this challenge for society, Hitachi is solving the management issues faced by customers

through a three-way integration model of procurement, logistics, and information by providing services from the perspective of overall optimization.

A demonstration project for this service at plants in China confirmed its ability to help reduce procurement and logistics costs, minimize inventory, cut procurement workloads, and improve logistics quality.

In addition to deploying this service model beyond China and into Southeast Asia, Hitachi intends to expand it into a service for supporting global logistics strategies by supplying services with high added value through the use, analysis, and evaluation of big data.

An article in this issue describes the service, the results of the demonstration project, and how Hitachi plans to expand the service based on these results (see p. 48).

#### **Services for Global Manufacturers**

In response to factors such as demand that fluctuates on a global scale and the intensification of price competition, the establishment of global development, production, and supply capabilities has become an urgent task for Japanese manufacturers. Accordingly, there is a need for a wide variety of service solutions, including those that can improve profitability or quality through global operations, entry into new industries, and a fusion of operations and IT that utilizes such technologies as M2M<sup>(b)</sup> and IoT<sup>(c)</sup>. To satisfy this need, Hitachi supplies services that provide global support for the activities of manufacturers, from design to maintenance, in the form of total supply chain management (TSCM).

There are many examples of manufacturers with factories operating throughout the world who are finding it difficult to maintain work quality at a level similar to that of Japanese plants, with staff recruitment and training unable to keep up with the rapid startup of overseas plants. In response, for the operations of supply and demand assessment and coordination of global procurement, delivery, and sales, and of local design, quality assurance, and design workload reduction, Hitachi supplies an IT platform as a cloud service that enables sites in Japan to determine the

situation at other sites, and to coordinate and instruct their activities.

An article in this issue describes details of this service and the technologies used to implement it (see p. 54).

### **Global Cost Management Solution**

One of the above solutions for TSCM is a cost management solution that Hitachi supplies to support business planning, product profit planning, and target costing in ways that take account of the benefits of regional strategy, technology strategy, and product strategy.

This is because of the importance of managing cost planning and activities aimed at manufacturing at a particular cost, which are effective at maintaining product profitability.

An article in this issue provides an overview of this solution and describes its features and example applications (see p. 60).

# CONTRIBUTING TO THE WORLD THROUGH EXPANSION OF GLOBAL IT SERVICE BUSINESS

This article has defined Hitachi's Social Innovation Business and provided an overview of its strategies for management consulting and operational services, the two core activities of Hitachi's global IT services that form part of this business, including example applications.

In the future, Hitachi aims to expand its global IT service business by enhancing its services based on these strategies, and to achieve social innovation and contribute to the world.

<sup>(</sup>b) M2M

Abbreviation of "machine-to-machine." It refers to the achievement of a high level of autonomous control and operation through the exchange of information between machines via a network.

<sup>(</sup>c) IoT

Abbreviation of "Internet of things." The connection to the Internet of various devices that in the past were not connected to networks so that they can exchange information, thereby enabling functions such as automatically recognizing each other and performing cooperative control

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