

I. Introduction

The purpose of this report is to provide information about R&D and intellectual property (IP rights and brand), which are the main components of technology management for the Hitachi, Ltd. and its affiliates.

This report covers the period from April 1, 2004 to March 31, 2005 (FY 2004), including new measures and organization changes at the start of FY 2005.

II. Hitachi Technology Management

The Hitachi Group offers information system services, society infrastructure systems, and the core hardware, software, and high-performance materials related to these services and systems. The goal of management reform has been to become a global supplier of total solutions.

The midterm management plan (2003 to 2005) called “i.e. Hitachi Plan II” further promotes this basic goal of becoming the best solution partner. Hitachi Plan II concentrates on strengthening management resources in two sectors. The first is next-generation lifeline solutions for society infrastructure, including information services and energy systems. The second is advanced technology products for high-growth global markets, including software and hardware in which Hitachi puts its technology and knowledge. By pursuing synergy between these two sectors, Hitachi is striving to harness collective strength and to differentiate the Group from competitors.

Upon achieving the objectives of “i.e. Hitachi Plan II,” Hitachi Group is striving toward further high growth in the mid- and long- term and united technology management. Specifically, Hitachi Group is pursuing execution of group-collaborative R&D, improvement of efficiency in R&D, and development of technology for Inspire A businesses.

The goal of collaborative innovation is to strengthen R&D through Group technology interaction and product development through vertical integration of technology. To achieve this goal, Hitachi Group Frontier / Platform Research was introduced in FY 2004 and Hitachi Group CTO Meeting (Fig. 2.1) was established to implement technology development strategy.

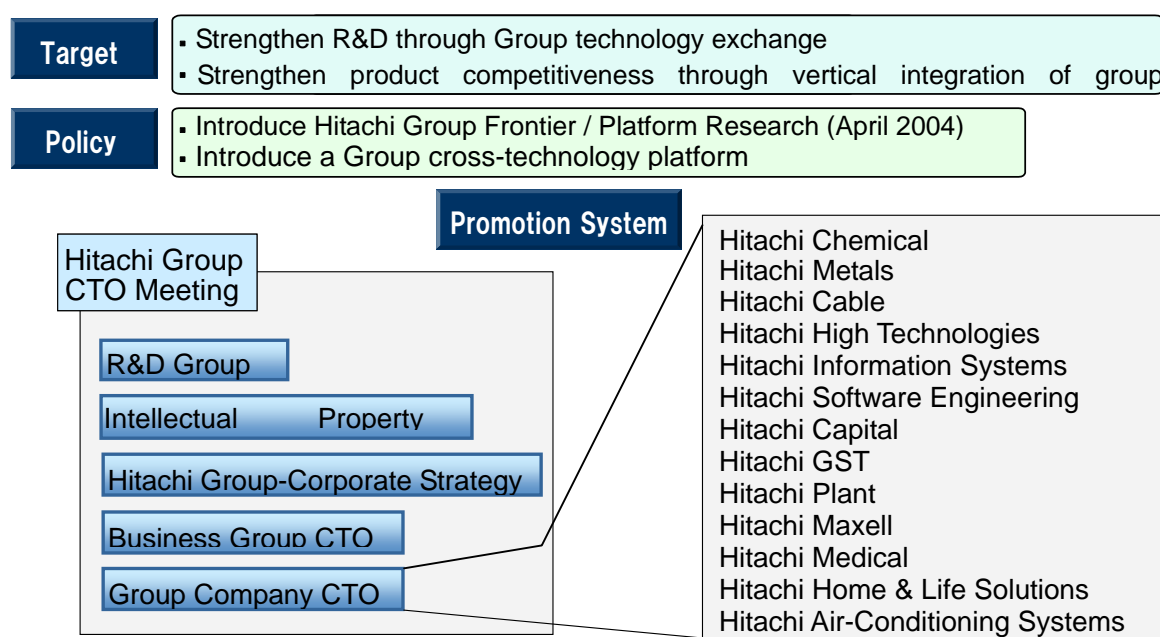


Figure 2.1 Toward a Group Collaborative Innovation System for R&D

In Hitachi Group Frontier Research, Hitachi Group is developing future core businesses that move beyond the borders of current business sectors as well as developing new paradigm-shift technologies, business models, and intellectual property. In Platform Research, Hitachi Group is focusing on shortening development periods and improving productivity, reliability, and basic technology.

In order to improve R&D efficiency, Hitachi Group is currently working on the issues of streamlining management and technology development road-maps, concentrating R&D resource on high-priority projects, and developing an open environment for group-wide collaboration. The goals of open R&D is to explore new technology seeds and to accelerate the speed of technology development through full-scale alliances with universities in Japan and overseas. To promote collaborative innovation with China, Hitachi Group established the Asia Elevator Development Center in FY 2004 and Hitachi (China) R&D Holdings Limited in April 2005. The goal is to increase the R&D workforce in China to 1000 people.

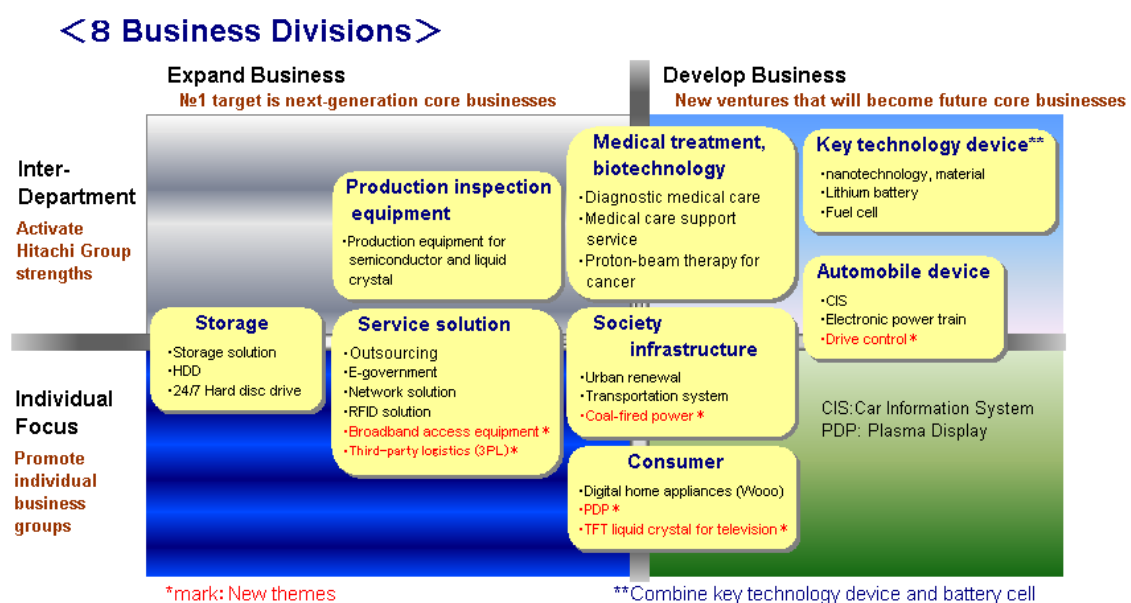


Figure 2.2. Inspire A Businesses

The goal of Inspire A businesses is to create core businesses that support the growth of Hitachi Group by expanding existing businesses and creating new businesses. Inspire A businesses are grouped into eight core sectors from storage to automobile devices. These core sectors are also the focus areas of technology development. Inspire A businesses has achieved some impressive results. In FY 2004, the SUNRISE Universal Storage Platform was announced. This platform is a new large-scale disk array subsystem that incorporates virtualization for the first time in practical disk array systems. In the storage sector, a one-inch micro-drive hard disk was incorporated into a portable music player. In the transportation sector, priority negotiation rights (May 2005) were obtained from CTRL-DS (Channel Tunnel Rail Link - Domestic) of UK to supply next-generation aluminum cars ("A-train"). In the battery sector, Hitachi Vehicle Energy, a new joint venture company was established to strengthen competitiveness in the lithium ion battery business.

In addition to the promotion of Inspire A businesses and the creation of new businesses, Hitachi Group is also strengthening its mid- and long- term technology strategy and its technology

development platform (generation of intellectual property, improvement of productivity, etc.).

Three activities have been initialized to strengthen mid- and long- term technology strategies: 1) development of Technology trend forecasts and long-term technology development plans by R&D divisions and labs; 2) development of business strategy roadmaps by business divisions based on the long-term technology development plans; and 3) achieving consistency between technology development plans and business roadmaps in the long term through discussions between R&D and business divisions. In particular, these activities are designed to improve efficiency in R&D projects that are directly related to business.

For strengthening the technology development platform, group-wide activities related to intellectual property (section V) and productivity in product development (the “HiSPEED/Next” activity) are ongoing. The productivity in engineering and manufacturing has been and will be improved continuously.

Intellectual property, which result from R&D, sustain the profitability of Group businesses. To pursue group synergy, Hitachi, Ltd. and the main group companies share common intellectual property strategies such as globalization of patent applications, and also share overseas offices of the Intellectual Property Group, and intellectual property specialists. In FY 2004, the incentive system for inventors in Hitachi Group was reviewed. Additionally, patents that were held separately by group companies were unified into a single patent portfolio. It is expected that taking such measures will deepen the collaboration among group companies in terms of intellectual property strategy.

In addition, the Hitachi brand itself is an important management resource and intellectual property. In April 2000, a brand management strengthening campaign was launched across the entire Group to raise the consolidated enterprise value to that of the leading enterprise groups of the 21st century. In April 2002, Corporate Brand Management office was established to incorporate the “brand viewpoint” into management and business decision processes, and to provide education in the importance of brand value to the employees. The Corporate Brand Management office will also contribute to the development of management and business strategies.

In addition to the value related to reliability and technology, the Corporate Brand Management office is developing the “Inspire the Next” platform and running related projects to enhance the Hitachi brand value. In R&D, sales, and communications activities, Hitachi Group is delivering a unified message and a standardized web design to the customers by strengthening contents management.