Responding to a Rapidly Changing Market

April 2008 to March 2010

Facing the Global Financial Crisis Following the Collapse of Lehman Brothers

In September 2008 the subprime mortgage crisis in the United States led to the collapse of the investment bank Lehman Brothers, triggering a global financial crisis and a worldwide business slump. The Japanese economy suffered from plunging stock prices and a rise in the value of the yen versus the weakened dollar. Actual GDP posted negative growth for two years running. The Hitachi High-Technologies Group experienced shrinking earnings and profits in fiscal 2008 and in fiscal 2009 its first ever financial deficit. In hopes of turning things around, the company embarked on a course of business restructuring and measures to promote growth.



Tadamichi Sakiyama Outside Board Director and Chairman



Hidehito Obayashi Representative Executive Officer, President, Chief Executive Officer, and Director

First Experience of Shrinking Earnings and Profits Due to Reduced Investment in Semiconductor Manufacturing Equipment

As fiscal 2008 began, a new Corporate Strategy Division was established by merging the existing CDB Development Group and Corporate Strategy Division in April, and this put in place a system whereby strategy would be formulated and executed comprehensively by the Corporate Strategy Department, Global Business Strategy Department, and New Business Development Department. The same month the new head office and factory of Hitachi High-Tech Instruments Co., Ltd. was completed in Kumagaya, and production of chip mounters got underway. In May a cleanroom facility was completed at the Saitama Division.

In June Tadamichi Sakiyama, who had an established track record in finance at Hitachi, Ltd., was appointed Outside Board Director and Chairman. In his message upon assuming the post, Chairman Sakiyama said that he anticipated that "business expansion will be achieved if we can boost corporate value by exhibiting the strengths of Hitachi High-Tech's business model of combining manufacturing, sales, and services to provide value to customers globally, increase our sensitivity to changes in the world around us, and undertake careful planning."

Also in June President Hidehito Obayashi held an "Executive Officers' Brainstorming Session" (BS8) at which all the executive officers met to discuss how to

maximize the corporate value of Hitachi High-Technologies Group. The no-holds-barred discussion at BS8 covered ways to strengthen the company's corporate foundations while noting the drastic changes in the business climate, and it examined topics such as assuring robust future growth, speeding up development, invigorating trading operations, and strengthening the business globally. Subsequently, such brainstorming sessions were held every two years, and they became established as venues for discussing medium-term management issues and firming up strategies.

In the midst of these positive initiatives, the collapse of Lehman Brothers occurred in September 2008. The fall of this major American investment bank triggered a global



New head office and factory of Hitachi High-Tech Instruments Co., Ltd.

Trading Activities

COLUMN 3 The Mobile Phone Business in America

financial crisis and a worldwide business slump that continued to expand in scope. Uncertainty about the implications for the U.S. economy as a whole caused the yen to rise as the dollar weakened. This strangled investment worldwide, including in the automotive and semiconductor sectors. In Japan more and more companies put into place temporary freezes on investment, and the business prospects of Hitachi High-Technologies took a sudden turn for the worse.

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President Obayashi decided that in order to overcome the first serious crisis faced by Hitachi High-Technologies since its integration, the entire company must act as one. In a message titled "To All Employees" he laid out the facts regarding the difficult business climate in the latter half of fiscal 2008 and the forecast for the company's consolidated financial results for fiscal 2008. He identified as urgent priorities active implementation of business restructuring, reduction of costs overall, speeding up of development, deepening of consolidated management, stronger cash flow management, adhering to "the basics and the ethics," preventing unnecessary losses, and systematic training of personnel.

Nevertheless, due to the effects of the slow recovery of the semiconductor manufacturing equipment and LCD-related manufacturing equipment markets, the consolidated financial results for fiscal 2008 showed a reduction in sales of 17.8% year-on-year to ¥775 billion, a 69.7% drop in operating profit to ¥14.9 billion, and a 73.7% reduction in current net profit to ¥7.1 billion. This was Hitachi High-Technologies' first year-on-year drop in earnings and profits since its establishment.

Overcoming the Crisis and Implementing Business Restructuring Aimed at Growth

The difficult business environment continued as fiscal 2009 arrived, and Hitachi High-Technologies, aware that uncertainty about the outlook for the world economy would continue for some time, launched a business restructuring program aimed at turning around the company's performance quickly.

The most urgent measures were considered to be a thorough review of personnel and costs. Steps taken included reducing executive remuneration; reducing equipment idle time; adjusting personnel levels by introducing early retirement; implementing business holidays; introducing delays in the system of regular raises; wage cuts; strict selectivity in capital investment and R&D expenditures; inventory reductions; and comprehensive review of sales, general, and administrative expenses.

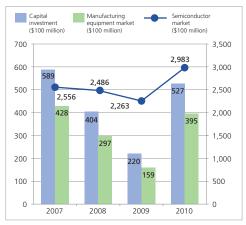
In addition to such measures intended to reduce costs overall, emphasis was placed on rebuilding to create an optimized management system as preparation for future progress and on accelerating the growth strategy.

As part of reorganization efforts aimed at an optimized management system, in April 2009 the New Business Development Department was eliminated from the Corporate Strategy Division and its functions transferred to sections dealing with trading operations. Also, the chip mounter—related operations of the Industrial Production Systems Div. were consolidated within the Packaging & Assembly Systems Dept. of the Advanced Equipment & Systems





Scenes from the brainstorming session held on June 28 and 29, 2008, where discussions were held on topics such as "speeding up development," "invigorating trading operations," and "strengthening the business globally"



Worldwide trends of the semiconductor market, capital investment, and manufacturing equipment market (source: 2011 Semiconductor Manufacturing Equipment Data Book)



New manufacturing building at Naka Division (operation started May 2009)

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Article in June 5, 2009, edition of *Nihon Keizai Shimbun* reporting stricter cash flow management policies



LABOSPECT 008 Hitachi automated clinical testing analyzer installed at Tokyo Technical Center

Sales Div., and a new SMT & Assembly Systems Division was established. These were placed within the Semiconductor Equipment Business Group in order to integrate the semiconductor back-end business.

The Life Science Business Group was renamed the Analytical Sciences Business Group, and analysis equipment—related businesses such as electron microscopes were transferred to its purview in order to integrate the analysis equipment business.

A Global Trading Group was put in place to optimize trading operations overall and create new business opportunities, and a Strategic Planning Division and Ecology & Energy Business Division were newly established within it. Under this new system, strategic initiatives and efforts to create new business opportunities in growth fields were encouraged. In particular, in

the energy and environmental solutions field there was a policy of aggressive promotion of businesses related to lithium-ion batteries, solar cells, and fuel cells. On the other hand, the Industrial Production Systems Division and Electronic Devices Division were disbanded.

In the manufacturing area, operations commenced at a new state-of-the-art manufacturing building at the Naka Division in May 2009, boosting production efficiency for semiconductor manufacturing equipment and medical analysis equipment.

To promote global expansion, Hitachi High-Technologies endeavored to establish firm foundations for future business in emerging markets such as China, the ASEAN nations, India, and Brazil. Emphasis was placed on training personnel who would be instrumental in opening up new markets and cultivating new business opportunities.

The difficult business climate continued into the second half of the fiscal year, and it was necessary to revise the performance forecast downward. President Obayashi focused the company's efforts on building a business system responsive to market fluctuations, creating new business opportunities, speeding up development, deepening consolidated management, implementing cash flow management, strengthening the company's global position, personnel training, and adhering to "the basics and the ethics."

Difficulties Engineering a Turnaround

As expected, the global economic slump continued through fiscal 2009, and the situation was worsened by the further rise in the yen exchange rate and spiraling crude oil prices.

In October 2009 President Obayashi released a message titled "Entering the Second Half of Fiscal 2009." He called for renewed efforts to build a business system responsive to market fluctuations, create new business opportunities, speed up development, deepen consolidated management, implement cash flow management, strengthen the company's global position, train personnel, and adhere to "the basics and the ethics."

Aiming for an early turnaround in business performance, Hitachi High-Technologies continued to reexamine its cost structure. Initiatives to cultivate new business opportunities in order to accelerate the growth strategy included the launch of *NEXT Yuho Kakumei*, an online service for trading in marketable securities; an organizational reform solutions business utilizing Business Microscope, a system for visualizing organizational activities; and High-Tech Vision, a video conferencing system business. Considerable emphasis was placed on these efforts to quickly boost revenue.

In October it was announced that Hitachi High-Technologies would be taking over the bonder business of Renesas Eastern Japan Semiconductor, Inc., with the spring of 2010 as the target timeframe. Also in October the Tokyo Technical Center opened as a facility for training customers in the use of medical analysis equipment. The center was outfitted with advanced machines and equipment, allowing training to take place comfortably and efficiently. Customers had a very favorable opinion of the facility, as it enabled their employees to understand the operation of the products and to thoroughly familiarize themselves with all aspects of them.

In other initiatives aimed at generating new growth, Hitachi High-Technologies teamed up with Britain's Centre for Process Innovation Ltd. and Hitachi, Ltd. to enter the direct methanol fuel cell business; a strategic partnership agreement was reached with XeroCoat, Inc. of the United States for the sale of anti-reflective coating equipment and materials for solar modules; and collaboration continued with Hitachi, Ltd., Hitachi Transport System, Ltd., and others on overseas procurement solutions.

In the second half of 2009 there were signs of improvement in the world economy, and there was hope of a gradual recovery of the economic climate in Japan.

Nevertheless, hopes for a full-scale market recovery in semiconductor and LCD-related equipment did not pan out, and the consolidated financial results for fiscal 2009 showed a reduction in sales of 20% year-on-year to ¥616.9 billion, an operating loss of ¥1.6 billion, and a current net loss of ¥2.8 billion. This was Hitachi High-Technologies' first financial deficit since its establishment.

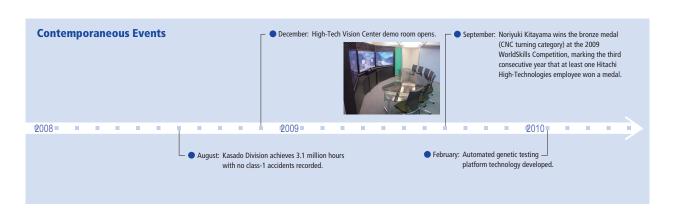
Even in this dire situation there were some bright spots. In April 2009 Hitachi High-Technologies was honored at the 2009 Excellence in Intellectual Property Awards with the "Commendation from the Minister of Economy, Trade and Industry (Outstanding Patent Strategy Company Award)."

This award recognized that Hitachi High-Technologies considers intellectual property to be a precious corporate asset and that it works actively to utilize it and increase its value.





Fiscal 2009, Excellence in Intellectual Property Awards ceremony



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PLC Instrumentation Systems for Small and Midsize Plants

In the more than 40 years since the development of the first Hitachi distributed control system (DCS) in 1975 there has been an emphasis on an inherited tradition in product development. The EX series, released in 1982, saw wide adoption in plants manufacturing intermediate and final products, generally from raw materials in liquid or granular form, in fields including food products, medicine, chemicals, the environment (trash incineration), and small-scale water supply systems.

Around the year 2000 the Japanese manufacturing industry was facing difficult external challenges, including the inflow of inexpensive products from overseas and a drop in the population of manufacturing workers. In response, many small and midsize plants producing food products and the like actively began introducing automated processes into their operations in order to boost production efficiency. In 2008, seeing this market demand, the companies then known as Hitachi High-Tech Trading Corp. and Hitachi High-Tech Control Systems Corp. developed the Hitachi PD-1 compact instrumentation system combining the general-purpose applicability of a programmable logic controller (PLC) and the analog control functionality of the EX series. The EH-150 series from Hitachi Industrial Equipment Systems Co.,

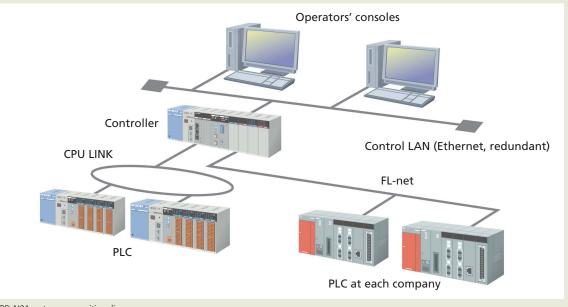
Ltd. was used as the general-purpose PLC.

In most cases in smaller plants each machine is controlled by its own PLC, but the PD-1 utilizes an open network to enable low-cost centralized management of multiple machines. This was a major selling point that motivated many small plants to purchase the system. In addition, the many easy-to-use system building tools developed for the EX series proved very popular.

In recent years the range of applications has grown beyond plants producing food products to include small pharmaceutical and chemical plants as well as R&D facilities. The PD-N01, the current model introduced in 2012, and its successors that will be developed and commercialized in years to come, inherit the DNA of the EX series.



PD-N01 compact instrumentation system



PD-N01 system composition diagram