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JMA *Resources for Global Management Development and Innovation*

Management News

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Japan Management Association

Lead Interview

Reading the Times DNA nurtured over 130 years

The 2005 World Exposition in Aichi, Japan has just closed in great success.

Under the theme of "Nature's Wisdom," it was a serious effort to identify how humans and nature can live in symbiosis and achieve sustainable development on a global scale.

Environment is a major issue both for individuals and business to step up to in the 21st century. The first seeds of our company were planted when Eiichi Shibusawa, founder and first president, was exposed to European cultures on occasions including the 1867 Paris Expo.

Inspired, he decided to stake his future on the Western-style manufacturing of one of culture's essential building blocks: paper.

The business was far from prosperous when started, for technology and skilled personnel had to be all imported.

However, from the beginning there existed a fundamental standard that business must benefit both society and people. Forest management was therefore a natural outgrowth of our paper-making mission, and today our forests around the nation cover over 190,000 hectares.

Forest conservation is an expensive effort, it reached one billion yen per year at its peak. However, even in the economy's darkest days, we never dodged our responsibility. 130 years of history have cultivated a corporate DNA which makes us recognize we are here to preserve the forestlands.

Today, forests are being reevaluated for their abilities. Not only as they absorb carbon dioxide or preserve water resources and provide pleasant scenery, but because of its renewable nature. A worldwide decline in woodlands continues and it is anticipated that the growing population will speed up wood



Shoichiro Suzuki
President & CEO,
Oji Paper Co., Ltd.

consumption rate.

Time has come that our long-running forest conservation and afforestation research can make an important contribution. Our investment so far was not a vain one, but will turn into a great company asset.

Our efforts are not limited to Japan. With domestically developed afforestation techniques, we are deeply involved in afforestation overseas. Our immediate goal is to plant trees over 300,000 ha by 2050, which is estimated to involve above 35 billion yen in total. Though no real returns will appear for another 10 to 20 years, these efforts are a key part of our environmental program, and we will not be deterred from our proactive efforts to gain forest certification for planted areas both domestic and international.

All Oji Paper plants have acquired ISO 14001 certification. We are moving beyond with the "Environmental Action Plan 21." This action plan was originally limited within the Oji Paper Co., Ltd. but now it provides the goal for the entire Oji Paper group. Furthermore, we intend to reduce fossil fuel energy consumption in terms of physical units by 20% by 2010 and lower CO2 emissions, also in physical units, 20% from 1990 levels. Such efforts require significant amount of investments, however it is a part of our responsibilities to adopt new techniques and technologies.

In the ultimate sense, such efforts are important for long-lasting profits. Just as trees grow each year ring by ring, so must a company, growing little by little in mass and height. Rapid growth is meaningless if the tree withers in the end.

Nature and environment are becoming increasingly important for all companies.

In our case, 130 years of effort has helped to nurture our corporate DNA necessary to take action. It is not that we hold a complete answer book, but we do possess fundamental standards by which we can judge if our efforts are beneficial to society and people. Such standards extend beyond the environmental issue. Many of the recent corporate scandals can be traced back to faulty judgment founded on equally faulty fundamentals. It is a matter of essentially ethics and morality. Merely giving lip service to Western-style compliance without superimposing such ethical and moral standards will do little to improve the individual judgment of employees. Our low employee turnover was one good thing for the maturation of corporate DNA. Fundamentals are what matters, and once you have it, you only need to think how to dress it to fit the times, instead of chasing fads blindly.

From that point of view, I believe that it is most important that companies establish fundamental standards that enable them to cope with the medley of issues that surround the modern company.

Special Feature

Developing Core People in the Manufacturing Floor *Developing change leader at* *the floor-level is the first step*

Koji Yamamoto

Transferring vital technologies and skills is indispensable to manufacturing. However, our core, front-line individuals those well versed in traditional Japanese manufacturing strongholds such as elemental technologies, process management, and quality control techniques are becoming scarcer. A nagging voice is heard that industrial technologies have become so advanced and extensive that the younger employees can never keep pace, something that could eventually weaken our industrial competitive strength.

The Ministry of Economy, Trade and Industry (METI) has launched the Advanced Technical Human Resources Development Project, responding to this voice. Capitalizing on cooperative consortia that bring industry and educational institutions together, the project seeks to create a new HR training system that can produce the core individuals that can maintain our manufacturing edge.

Japan Management Association (JMA) is joining this effort. Through a better understanding of current manufacturing realities, we are positioning ourselves to assist manufacturers in their future efforts to better develop core human resources.

Core HR development ideals

At the request of METI, JMA conducted a fact-finding survey on development of core HR on the frontlines of manufacturing between December 2004 and March 2005. Questionnaires were distributed to approximately 10,000 manufacturers around the nation and 1,534 valid responses were received. Interviews to 50 companies were also conducted.

The survey was multipurpose: to reveal current circumstances and challenges facing the manufacturing frontlines and core people; the content of current human resources development efforts; and current unfulfilled needs. Data of this survey will form the foundation for the METI-led Advanced Technical Human Resources Development Project.

Here, "core human resources in manufacturing site" refers to technical experts who are vital in the manufacturing floor, due to their deep experience with the elemental technologies, process management, and quality control techniques that are so indispensable to manufacturing. R&D field is not included.

The followings are challenges identified by the survey and the ideal image of the core people: what sort of roles and skills are expected to them.

Three deep anxieties

The survey revealed three leading concerns for production sites and their people.

The first is the stagnating transfer of technology and skill, plus self-learning quiescence. This is often called the "Year 2007 issue," the beginning year of volume veteran retirements. Significant proportion of production site technicians and experts with long, diverse and practical experience will be gone. In exchange, we are seeing an industry-wide increase in temporary personnel and contract workers on the production lines as a result of the March 2004 deregulations. As a result, fear is rising – would it be possible at all to pass on the practical skills, the very foundation of competitive strength, to the next generation? Present site leaders are not quite capable enough to lead on-site technical skill transfers. Never-ending corporate restructuring and shortening product life cycles are also exacerbating the situation. Production workers are being deprived of the time to spare for gaining technical knowledge and skills, not to speak of the time for self-learning.

Second anxiety is about the ability of core production personnel to maintain a close relationship with the R&D side of the house, yet it will be more important than ever as product life cycles continue to shorten.

The ever-harsher business environment makes it most difficult for the core personnel to keep pace with the challenges. The third concern lies here.

Manufacturers are worried about the lack of capacity to cope with quality and safety management issues: capacity to detect and prevent daily problems and to resolve them quickly and properly. Such on-site capabilities were long been the root of Japanese manufacturing's competitive edge, but they are now a source of concern for many corporate leaders.

What abilities are required to the core personnel?

What abilities are required to the core personnel? Traditional lecture-type training and hitor-miss on-the-job training won't be enough to consistently produce core human resources. To develop necessary problem-solving skills, we should be looking to a combination of theory and practice, in-class training and substantive on-site experience. Practical technology education will be particularly important for those expected to lead comprehensive improvement on site.

Future core human resources training arena should be affluent with the opportunities to: 1) cultivate decisionmaking skills as floor leaders; 2) get other people involved; and 3) develop internal fortitude and self-reliance. A theory-to-practice flow will help our future core people to understand topical issues at a root level. Together with problem-solving and leadership skills tempered by on-site experiences, our front-line core leaders can be said to be fully equipped with the tools to bring positive change to the manufacturing floor.

Such style of training & education requires close cooperation among industry, academic institutions and government.

Proficiency in each field should be brought in. One example is to incorporate simulated experience into HRD program.

Trainees will study production techniques, management engineering and

production management theory at college and then go into the actual manufacturing site to apply the knowledge to achieve target. Action is also expected on the governmental side.

Government currently offers certificate exam system that evaluates and certifies proficiency in industry-specific technologies and skills, but other certificate will be required to assess the problem-solving skills at manufacturing sites.

Making use of both youth and experienced

Cooperation beyond age and division is indispensable to improve productivity.

Core personnel is of course important but we must not ignore those who support the core people.

First, a system is needed; a system that encourages transfer of technical knowledge and skills from the veteran employees to our future floor leaders. Such knowledge and skills are not an asset belonging to a single company, but rather a valuable asset of the whole Japanese industry. If our veteran workers can take a leadership in making this vital asset flow between industries, it will be a powerful catalyst in maintaining the vigor of Japan's economy. To this end, such veteran workers should be equipped with skills to convert tacit technical knowledge into explicit knowledge, while being the mastery of teaching and communicating.

Younger personnel are important both as supporters to the core personnel and as the leaders in the future. Yet, the recent tendency to shun manufacturing in choosing career is posing difficulties to the small businesses to recruit talented workers. It is therefore important to let younger generation experience, before they enter the business world, the joy and sense of worth that come from creating things with their own hands.

One possibility is to bring a long-term cooperative program into the curriculum of technical high schools, program that presents a hands-on experience at actual manufacturing site. To put the students down to the floor is another idea: they will pursue the process of problem finding and solving by themselves under the surveillance of professional instructors.

Other possibilities include observation tours of outstanding manufacturers and lectures given by veteran workers renowned for their artisan skills.

These sorts of efforts are needed because once our young people enter the corporate workforce, they are so pressed by everyday work demands and finding room for anything will be quite difficult. It would therefore be ideal if we could let our young people experience firsthand the genuine joy that comes from manufacturing before placing them in the daily pressure cooker of regular employment.



Challenges Facing Japan-US Manufacturers Studied in Chicago

US and Japanese companies gathered for JMA Group Global Seminar 2005 in the USA

JMA Group Global Seminar 2005 in the USA convened on May 26 in outer Chicago area. 138 individuals attended the event, most of whom being executives and managers at US companies and Japanese companies operating within the US.

The seminar is an annual event since 2000, jointly sponsored by JMA and its seven affiliated companies. Previous seminars have been held in London, Milan, Paris, Shanghai, and Seoul. This year marked its US debut.

The seminar centered on "Strengths of American and Japanese Manufacturing Industries—The Changing Business Environment and Potential Solutions." Mr.

Atsushi Niimi, President & CEO of Toyota Motor Manufacturing of North America (TMMNA), and Dr. Wallace Hopp, professor with Northwestern University's Kellogg Graduate School of Management, were the keynote speakers and representatives of each nation.

Mr. Niimi focused on how the Toyota Production System (TPS) can work in the US, and shared the efforts of TMMNA since 1980s, including management innovations that was employed. He declared that Toyota's North American operations have reached a point where they need greater independence, and human resources development is the key to make it happen. "Manufacturers cannot advance unless they make people," he concluded, suggesting how the Japanese proverb of "perseverance leads to success" applies equally to all countries.

Professor Hopp explored the cultural gap that could be seen from the origin of lean production system. "Americans tends to be drawn to dramatic solutions or techniques for the problem, while Japanese efforts are more often continual and routine," he analyzes. Though the Japanese process appears to be boring, he expressed the belief that no quality manufacturer can prosper without proper dealing, and certain level of tediousness is inevitable in any business process.

An active panel discussion followed the keynote addresses and took up topics including employee recruiting, maintenance, and education/training.

Questions from audiences added to the liveliness and it was highlighted that the trend towards manpower globalization shows no signs of slowing. A clear example was found in the fact that 60% of the Kellogg School of Management's graduates are now working outside the US.

The discussion was concluded that in a culturally diverse environment, trust is essential. Trust can only be established through mutual understanding and acceptance of differences, and individuals capable of this will be the key for future corporate success. The seminar ended with round of applause, and participants were observed everywhere deep in enthusiastic discussions at the reception that followed.

For inquires about this or future seminars, please contact the JMA Global Division at 03-3434-2375.

Digest

TECHNO-FRONTIER 2005 Wraps Up! 123,159 gathered to latest elemental technologies event

Organized by JMA, TECHNOFRONTIER 2005 was held over three days from April 20–22 at Makuhari Messe in Chiba. TECHNO-FRONTIER is an inclusive term of the technical trade shows and symposia dedicated to the latest elemental technologies. It is a stage of exploration and interaction for the designers, developers, production technicians and other specialists engaged in the field of equipment, machinery, devices, and systems.



TECHNO-FRONTIER 2005 consisted of 10 exhibitions: MOTORTECH JAPAN 2005, MOTION ENGINEERING JAPAN 2005, BOARD COMPUTER JAPAN 2005, POWER SUPPLY JAPAN 2005, ENERGY-SAVING & ECO-DESIGN 2005, EMC JAPAN 2005, THERMAL ENGINEERING 2005, AUTOMOBILE ELECTRONIC COPONENTS 2005, PERSONAL AREA NETWORK TECHNOLOGY 2005, and GLOBAL MANUFACTURING PARTS AND DEVICES SHOW 2005.

It also included nine symposia: MACHINE TOOL SYMPOSIUM, APPLIED MAGNETIC TECHNOLOGY SYMPOSIUM, MOTORTECH JAPAN SYMPOSIUM, POWER SUPPLY AND BATTERY TECHNOLOGY JAPAN SYMPOSIUM, THERMAL ENGINEERING SYMPOSIUM, EMC JAPAN SYMPOSIUM, AUTOMOBILE TECHNOLOGY SYMPOSIUM, NANO AND PRECISION TECHNOLOGY DEVELOPMENT SYMPOSIUM, and a special presentation.

In total, TECHNO-FRONTIER 2005 featured 559 exhibiting companies in 1,386 booths and attracted 123,159 visitors. The event was focused on the specialized technologies that are essential to product design and development. By also facilitating technical exchanges, TECHNO-FRONTIER offers the ideal forum for exhibitors to present proprietary technologies and users to find solutions.

The combination of numerous technical trade shows produces a synergetic web of interrelated proprietary technologies and helps TECHNO-FRONTIER fulfill its mission of providing comprehensive technical solutions.

TECHNO-FRONTIER 2005

TECHNO-FRONTIER 2005's diversity encouraged unique displays of exhibitors' proprietary advanced elemental technologies. Lounge spaces for business meetings

supported visitor contact, helping to make the show a place for business in addition to being a mecca for technology-focused information.

JMA GROUP

Japan Management Association (JMA)

Activities:

Survey, research and advisory services/Management education/
Technical conferences and conventions/Management system audit/Others

3-1-22 Shiba Koen, Minato-ku, Tokyo 1058522

Tel. +81-3-3434-1601 Fax. +81-3-3434-1087

URL. <http://www.jma.or.jp/indexeng.html>

Japan Institute of Plant Maintenance (JIPM)

Activities:

Research proposals of plant maintenance, information services,
promotion of plant maintenance, TPM Awards

3-1-38 Shiba Koen, Minato-ku, Tokyo 1050011

Tel. +81-3-3433-0351 Fax. +81-3-3433-8665

URL. <http://www.jipm.or.jp/>

Japan Institute of Information Technology (JIIT)

Activities::

IT Excellent User Award, Promotion of IT management strategy,
Contact Center activity promotion, Research activities

JMA Building, 3-1-22 Shiba Koen, Minato-ku, Tokyo 1050011

Tel. +81-3-3434-6677 Fax. +81-3-3459-1704

URL. <http://www.jiit.or.jp/>

Japan Society for Technical Communication (JSTC)

Activities:

Undertaking technical document preparations/
English Technical Writing Test/Others

3-1-22 Shiba Koen, Minato-ku, Tokyo 1050011

Tel. +81-3-3434-2350 Fax. +81-3-3434-2486

URL. <http://www.jstc.or.jp/>

JMA Consultants Inc. (JMAC)

Activities:

Management Consulting/Education and Seminars/Others

35Fl., Shiroyama JT Trust Tower 4-3-1 Toranomon, Minato-ku,
Tokyo 1058534

Tel. +81-3-3434-7331 Fax. +81-3-3434-6430

URL. <http://www.jmac.co.jp/>

JMA Systems Corporation (JMAS)

Activities:

Specializing in computer software

1-16-1 Kaigan, Minato-ku, Tokyo 1050022

Tel. +81-3-3431-7401 Fax. +81-3-3431-7063

URL. <http://www.jmas.co.jp/>

JMA Research Institute Inc. (JMAR)**Activities:**

Surveys and researches/Information services/Others

3-1-22 Shiba Koen, Minato-ku, Tokyo 1050011

Tel. +81-3-3434-6282 Fax. +81-3-3578-7547

URL. <http://www.jmar.co.jp/>

JMA Management Center Inc. (Abbreviation: JMAM)**Activities:**

Human Resources and Manpower Development

Shiodome Sumitomo Bldg. 24F, 1-9-2 Higashi-shimbashi,

Minato-ku, Tokyo 1058520

Tel. +81-3-6253-8000

URL. <http://www.jmam.co.jp/corporate/english/index.html>

JIPM-Solutions Co., Ltd. (JIPM-S)**Activities:**

TPM and Plant Maintenance Consulting, Seminars,

Publications, TPM Awards

3-1-38 Shiba Koen, Minato-ku, Tokyo 1050011

Tel. +81-3-3433-3281

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