



GATIC 2006 CREATING NEW INNOVATIONS BY NEXT-GENERATION MOT Strategic Roadmapping and Service Science for Innovation

Organizers:

METI (Ministry of Economy, Trade and Industry),
GATIC-Japan (Global Advanced Technology Innovation Consortium),
Ritsumeikan University,
JAIST (Japan Advanced Institute of Science and Technology)

October 30-31, 2006 Kyoto, Japan
Conference Hall, Suzaku Campus, Ritsumeikan University

Registration starts from September 6th 2006, at <http://www.ilcc.com/gatic2006/registration.html>
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Background

Nano- and bio-technologies, Information technology and the cognitive sciences, and advanced materials and sensors and other science-driven technologies are transforming product development, operations, planning and regulation across a wide range of industries. The pace of change is fast and growing faster, testing the managerial capabilities of even the most successful firms. Existing tools and practices are inadequate to cope with the challenges managers face in planning, managing, assessing, and deploying these new technologies, and linking them successfully to commercial opportunities. New methodologies and processes that combine academic and practice-centered knowledge are thus needed to prepare today's managers for tomorrow's technologies.

Leading the way forward is the Global Advanced Technologies Innovation Consortium (GATIC). Established in 2002, GATIC brings together experts from ETH in Switzerland, Northwestern University in the USA, and JAIST in Japan, in collaboration with some ten other universities and over 120 top firms and other stakeholders spanning three continents. Its goal is to provide the necessary infrastructure that will support the development of creative solutions to the problems of managing technology in high-growth, science-driven sectors in volatile global markets. Additional information will shortly be available on the new GATIC website at...
<http://www.oakring.com/gatic/>.

The Conference:

The purpose of the Kyoto conference is to present and discuss issues and findings from GATIC's research activities over the past years. It will bring together academic researchers, industry leaders, and policy makers from Japan, Europe, and the US. Presentations and panel will be organized around four themes:

Next Generation of MOT: What new methodologies are being developed for managing knowledge that will fuel tomorrow's new technologies? What insights can be gained from today's most successful companies? How are policy makers and educational institutions responding to the challenge of creating a new infrastructure for educating tomorrow's technology managers?

Service Science: The importance of service in highly developed economic society is fast increasing. It is becoming significant in both advanced and emerging nations and in companies that provide hardware, software and systems as well as those that provide service itself such as banks, hospitals, transportations, etc. However, it has not yet come to draw great attention. This meeting

will look at the case in the U.S. where service has been fast recognized as a critical part of corporate strategy.

Convergence: The New Horizon: While attention is beginning to be paid to the previously mentioned advanced and game-changing technologies it is already becoming evident that the greatest value and disruption will come from the convergence of these technologies - with each other, resulting in opportunities and threats coming from surprising and cross-disciplinary sources, and, with legacy systems, infrastructure, technologies and organizational frameworks. In many manufacturing industries, significant physical legacies in the form of facilities and use infrastructure will lose much of their value. Cultural legacies such as silo-based corporate structures, professional, departmental, administrative level and discipline boundaries, long-standing policies, procedures, communications channels, current dogmas, competencies and long-held assumptions may hinder the ability of companies to capitalize on the converging technologies.

Strategic Roadmapping:

In the years 2005 and 2006, METI (Ministry of Economy, Trade and Industry) and its affiliated NEDO worked to develop Strategic Technology Roadmap of wide range of technology-based industries, which have been disclosed on the website to be practically used. Strategic roadmapping, which has been recently paid attention as a practical methodology for innovation management, will be discussed toward future, having reports regarding its basic concepts, methodologies and recent practical application examples.

Major changes will be needed in design, production, distribution, supply chains and management processes in turn requiring broad un-training and re-training, new inter- and intra-organizational structures, and new strategic knowledge and technology tracking and management tools and approaches.

We look forward to welcoming you to this GATIC symposium in Kyoto, Japan.

Yuko Yasunaga, *Director, Research and Development Division, Industrial Technology and Environment, METI*

Akio Kameoka, *Chair, GATIC-Japan, Professor, Graduate School of Knowledge Science, JAIST*

GATIC:

An International MOT Consortium for University-Industry Collaboration to Create Service/Product/Technology Innovation in Theory and Practice

— What, Why, How?

What is GATIC?

GATIC is a federation of regional consortia, initiated by the technology and innovation management programs at ETH (Zurich - Europe), JAIST (Japan) and Northwestern University (US), with evolving participation by other regions and universities.

Why is GATIC needed?

Fundamental scientific advances are increasingly influencing patterns of technological change in industry. At the same time, markets are changing rapidly and often unpredictably. Competitive advantage will thus depend on a firm's ability to match emerging science-driven knowledge to the ever-changing needs of consumers faster and more efficiently than competitors. However, linking emerging knowledge to commercial opportunity is no easy task; it requires the capacity to stay abreast of the relevant science, to forecast trends in both the science and the market, and perceive opportunities to fuse knowledge from different fields, such as nanotechnology and biotechnology, and advanced electronics and machine systems.

Success in such a dynamic environment requires responsive organizational structures and processes, and the focused use of new foresight, planning/management systems and tools attuned to the emerging phenomena. These need to draw on appropriate models, insights, competencies linked together with real-time experience from a wide range of specialized sources. No single consulting firm, university, agency or operating firm can today provide such help. To address this challenge is the goal of GATIC.

What will GATIC deliver?

GATIC will provide a forum for sharing knowledge, practice and insights through regional and global meetings. It will be a resource for new knowledge on managing technology. Speakers and websites will present and exchange pointed practical intelligence on strategic implications of and

application guidelines for new technologies and convergence. The focus will be value-creation rather than technical issues of individual technologies. Particular emphasis will be given to how companies of all sizes can and do succeed in this domain.

GATIC will also spawn a flow of beta sites and learning drivers pushing the boundaries of management thinking for advanced technologies.

Enabled by a flexible and continually growing global pool of technical as well as contextual experts linked through a proprietary research and intelligence framework, GATIC, through its inter-connected regional centers, will offer:

- *Customized research* support for individual member companies, groups of members and governments
- *Training and help* in setting up effective in-house units and processes to adapt and apply a pantheon of applicable tools integrated through advanced and practice-based knowledge processes
- *Monitoring* of weak signals in the environment by creating basic roadmaps to catch key events and developments early and testing the impact of these changes against a range of possible futures.

How Can You Become Involved?

Please plan to attend the GATIC-2006 on October 30-31, 2006, in Kyoto, Japan, by completing the form below.



GATIC 2006

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Strategic Roadmapping and Service Science for Innovation

Note: This program is subject to change. Simultaneous interpretation will be provided at the conference.

October 30 (Mon) Registration from 9:00		October 31 (Tue) Registration from 9:00	
9:30-10:00	<p>Chair: Prof. Kameoka, Chair, GATIC-Japan Opening Addresses: Prof. Sadao Kawamura, Executive Vice President, Ritsumeikan University Prof. Michael Radnor, Chair, GATIC-International,</p>	9:00-12:00	<p>Chair: Prof. Kohtsuki, Ritsumeikan University Theme: Next Generation MOT and Strategic Roadmapping Problems in the National Innovation Creation Mechanism in Japan and Actions for the Future Dr. Yuko Yasunaga, Director, Research and Development Division, Industrial Technology and Environment, METI Strategic Roadmapping as a Tool for Next Generation MOT Dr. Richard Albright, GATIC Fellow, (Formerly Bell Lab.) Advanced Strategic Roadmapping: S-plan Dr. Robert Phaal, Fellow, IfM, University of Cambridge Business Model and Roadmapping Dr. Hitoshi Abe, leader, Committee for Innovation Support Technology Committee, Assistant to CTO, Okidenki Co. Ltd. Roadmapping in Japanese Company: Murata Seisakusho Murata Seisakusho Co., Ltd.</p>
10:00-12:00	<p>Chair: Prof. Tschirky, Co-Chair, GATIC-International Theme: World Trends Of Next Generation MOT (USA, Europe, Asia, and Japan) Next Generation MOT and Strategic Innovation Management Prof. Michael Radnor, Northwestern University, Kellogg School of Management Advanced MOT for Creating New Value Innovations Prof. Derek Abell, President, European School of Management and Technology (ESMT) MOT from the Standpoint of Managing Research Institute-How Dynamism is Bought About Dr. Masanori Yoshikai, Vice President, National Institute of Advanced Industrial Science and Technology (AIST) Strategic Goal of Next Generation MOT: Challenge to "Just- in-Time Innovation" Prof. Akio Kameoka, Graduate School of Knowledge Science, Japan Advanced Institute of Science and Technology (JAIST)</p>	12:30-13:00	<p>GATIC Luncheon Talk: Technology, what is is for?- Perspective Technology Landscape of "Technology Strategy Map"- Dr. Keiji Okada, Executive Director, NPO WIN</p>
12:30-13:00	<p>GATIC Luncheon Talk: Next Generation MOT: Innovation Management for Creating Future Dr. Atsushi Yusa, Executive Director, The Future Creation Laboratory, Olympus Corporation</p>	13:30-15:30	<p>Chair: Prof. Kohtsuki, Ritsumeikan University Theme: Practices of Strategic Roadmapping Enhancing Communications Among Industry, University and Government Dr. Masayoshi Watanabe, Director for R&D Policy Planning, Research and Development Division, Industrial Technology and Environment, METI Services Innovation: New Challenges/New Models Prof. Shlomo Maital, Samuel Neaman Institute, Technion, Israel Innovation management in Telecommunication services Mr. Naoyuki Morita, Executive Vice President, Kyosera Co. Ltd. Chairman and President, Kyosera Communications Co., Ltd. New MOT in Practice Dr. Hugo Tschirky, Professor, Swiss Federal Technology University (ETH, Zurich)</p>
13:30-15:30	<p>Chair: Prof. Ikawa, Japan Advanced Institute of Science and Technology (JAIST) Theme: How to Create Service Innovations -Emerging Service Sciences Services Innovation: Practice in IBM Dr. Kazuyoshi Hidaka, Senior Manager, Tokyo Research Laboratory, IBM Japan, Ltd. Space Value Service Innovation and Roadmapping Prof. Shotaro Kohtsuki, Graduate School of Technology management, Ritsumeikan University Total Solutions Sustaining Innovations: From Products to Service Mr. Alec McMillan, Director, Global Standards & Trade, Rockwell Automation Service Engineering and creating Service Innovation Prof. Tamio Arai, Engineering Department, Tokyo University</p>	15:30-15:45	<p>GATIC Coffee Brake</p>
15:30-15:45	<p>GATIC Coffee Brake</p>	15:45-18:00	<p>Chairs: Dr. Susan Gaud, GATIC Fellow (Formerly Kraft, Chair, Industrial Research institute) & Prof. Shuji Kondou, Japan Advanced Institute of Science and Technology (JAIST) Panel Discussion: Creating Next Generation Innovation and MOT Frontiers: Practice in USA, Europe Asia and Japan: Global Collaboration Dr. Hiroshi Suzuki, Chair, IEEE EMS Japan Chapter Executive Director, GE Japan Prof. Masanori Nanba, Ritsumeikan University Prof. Derek Abell, President, European School of Management and Technology (ESMT) Prof. Hugo Tschirky, Swiss Federal Technology University (ETH, Zurich) Dr. Robert Phaal, Fellow, IfM, University of Cambridge Dr. William McAllister, Director, Siemens Power Mr. David Grossman, GATIC Fellow (Formerly GM) Prof. Clinton Francis, Law School, Northwestern University Summary Remarks: Prof. Michael Radnor & Prof. Akio Kameoka</p>
15:45-18:00	<p>Chair: Prof. Genba, Ritsumeikan University Panel Discussion: How to Change Japan: - Proposal from Younger Generation Mr. Koji Kuroda, Senior researcher, Technology Development Center, Japan Ink Co. Ltd. Miss. Afsuko Koizumi, Senior researcher, System Development Lab. Hitachi Co. Ltd. (MOT Course, Japan Advanced Institute of Science and Technology) Mr. Motoki Korenaga, Deputy Director, Research and Development Division, METI Dr. Shunpeta Tamada, Associate Professor, Kwasei-Gakuin University Mrs. Mariko Mikami, Journalist, Anchorperson of TV program "Future Business Frontier", NHK Dr. Meng Li, Associate Professor, Shanghai Jiao Tong University Dr. Serhiy Gvozdirov, Professor, Kiev Mohyla Business School, Ukraine</p>	17:45-18:00	<p>Chair: Dr. Kameoka, Chair, GATIC-Japan Closing Address: Dr. Yuko Yasunaga, Director, Research and Development Division, Industrial Technology and Environment, METI</p>
19:00-20:30	<p>GATIC Reception Greeting: Dr. Tsuneo Nakahara, Chairman, The Japan Society for Science Policy and Research Management, Chairman, Japan Engineering Academy</p>	18:00-19:00	<p>GATIC Networking and Clinic</p>