



Dr. Iwamoto is a Project Professor of Graduate School of Business Administration, Keio University and a senior advisor of Dream Incubator Inc. Prior to joining Keio University, he was an Operating Officer of Dream Incubator and developed strategic consulting businesses in the technology management field and industry producing businesses in the multi-disciplinary field of technology, strategy and public policy. Before joining Dream Incubator in 2002, he worked as a research manager of Nokia Research Center and as an R&D engineer of Lucent Technologies (Bell Laboratories) and Motorola (Semiconductor Sector).

Dr. Iwamoto received his Ph.D. and MS (Master of Science) degrees in Materials Science and Engineering from the University of California, Los Angeles (UCLA), and his BE (Bachelor of Engineering) degree in Metallurgy from the University of Tokyo.

Title

Business Government Relations for New Industry Creation

Abstract

Dream Incubator Inc. (DI) is one of the top strategic consulting firms in Japan and has been involved in industrial policy development for new industry creation since 2008. The new industries include energy and environment, low-carbon society, agriculture, forestry and fisheries, logistics, social infrastructure, Cool Japan, town development for aging society, regenerative medicine etc. DI proposes vision, scenario and scenario achievement process for new industry creation to the government. After the details of industrial policies are determined, DI goes to the main player (private company) which can lead new industry creation, gathers necessary players and acts as a manager, which DI calls a “business producer”. As DI’s achievement shows, the business government

relations are very important for new industry creation and the framework of the business government relations is presented based on the real examples for new industry creation.



Dr. Norimasa Kishi
Senior Innovation Researcher
Nissan Research Center
Nissan Motor Company Ltd..

Dr. Norimasa Kishi joined Nissan Central Research Laboratory (currently, Nissan Research Center) in 1978. Since then, he has been active in research on automotive electronics and intelligent vehicle systems. Around-View-Monitor (AVM) system, which is now a standard feature on most Nissan vehicles showcases one of his research accomplishments. Through his research career, he has won several awards for his innovative research results, including the first voice-recognition system for automotive applications, the "Birdview" navigation system, and the Artificial Intelligence-based interior layout design system.

Title

New Trends on Automotive Technology
-Electrification and Vehicle Intelligence –

Abstract

World sustainability issues such as environment, energy, traffic accident and congestion, will impact Mobility, thereby they will re-define mobility forcing Car companies to re-think their business model and technologies. This presentation sets the stage for visionary thinking by identifying most important technologies. Next, "Electrification and Vehicle Intelligence" as the identified technology solutions will be explained by video examples of NISSAN LEAF and Nissan Autonomous car (Prototyping). Finally, some discussion issues on rethinking of PLM

issues are proposed from the view point of future car.



Kuniyuki IMANARI joined IHI in 1987 after taking master degree of aeronautics from University of Tokyo. He had experience in advanced technology development for aerodynamics and performance system as well as product engine development. Since 2011, he is general manager for research and technology development for engine system, such as engine performance, air & oil system, mechanical components and thermal & structural analysis.

Title

PLM in aero-engine development

Abstract

Aero-engine business has a distinctive feature to focus on technology-driven customer value. Fuel consumption has become the most important index since oil price began to rise in the latter 2000s. Now its improvement has the highest value on aviation. However, in order to find solutions improving fuel consumption, enormous amount of iterative design and simulation works are required in multidisciplinary areas within limited time span. IHI had developed 3D CAD/CAM/CAE & PDM system and they functioned well till today. However, it is necessary to continuously improve productivity and lead-time on design to production to survive global competition. It is time to evolve into more sophisticated PLM. Problems are defined and step by step actions under-conducting were shown.



Tatsuo Endo is a Technical Advisor for Siemens PLM Software and his key focus is on Manufacturing in various on-going business initiatives.

He started his PLM experience with a Japanese automotive Tier 1 company then expanded to customer support and pre-sales in a Japanese CAD/CAM solution provider. He is currently responsible for pre-sales for Part Manufacturing Solutions including NX CAD/CAM, collaborative work with partners including resellers and machine tool OEM companies. Key Accounts include Nissan, Mazda, IHI, DMG MORI SEIKI, OKUMA, Yamazaki Mazak, ISID, DIPRO, and CTC.

He has a degree in mechanical engineering from Kogakuin University and has been with Siemens PLM Software since 2000.

Title

Industrie 4.0 - A vision on the way to reality

Abstract:

Siemens has been instrumental in helping to shape "Industrie 4.0" vision. With its unique software and hardware portfolio, Siemens can offer solutions at the cutting edge of technology, and is set to play a crucial and influential role at the forefront of further development. This presentation provides an overview of Industrie 4.0 from Siemens.

The term "Industrie 4.0" refers to the fourth industrial revolution.

Industrie 4.0 is a project in the high-tech strategy of the German government which promotes the computerization of traditional industries such as manufacturing. The goal is the intelligent factory (Smart Factory), which is characterized by adaptability, resource efficiency and ergonomics as well as the integration of customers and business partners in

business and value processes. Technological basis are cyber-physical systems and the Internet of Things.

Industry 4.0 (11 June 2014, 21:26 UTC) *Wikipedia: The Free Encyclopedia*.

Retrieved from http://en.wikipedia.org/wiki/Industry_4.0



Isao Tanimoto

Alps Electric Co., Ltd.

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- 1965 B.A. in Mechanical Engineering, Shizuoka University
Tooling division, ALPS Yokohama plant, ALPS Electric Co., Ltd.
- 1978 Parts Production General Manager , ALPS Soma plant, ALPS Electric Co., Ltd.
- 1987 Division Director, ALPS Kakuda plant, ALPS Electric Co., Ltd.
- 1994 Director, ALPS Electric Co., Ltd.
- 2000 Managing Director, Business Development Division General Manager,
ALPS Electric Co., Ltd.
- 2004 Senior Managing Director, Design, Quality, and Advanced manufacturing
Engineering, ALPS Electric Co., Ltd.
- 2008 Technical Adviser, ALPS Electric Co., Ltd.
- 2008 Guest Professor, Iwate University
- 2012 Guest Professor, Shizuoka University
- 2010-Present
Vice President, Robust Quality Engineering Society

Title

The Great East Japan Earthquake and Revitalization of Japanese Economy
~Technology Management for Japanese Economic Revitalization~

Abstract

Japanese companies had recovered very quickly from the Great East Japan Earthquake. However, we are still at the post-disaster recovery and struggling for revitalization and

further development. Disaster area is a major food production area in Japan, and the nuclear power plant accident has changed the energy structure. As a result, economic structure had changed. Revitalization of Japanese economy is a key to get recovery from the great disaster.

Look at the industries in the past high economic growth period, sampling inspection is the way to guarantee the product quality and production process is the area to improve both quality and cost. Fast launching new product and following Kaizen activity to keep having competitiveness. This is the origin of Japanese business management. However, we were failed to respond flexibly to the major global economic structure changes, and our economy is still on the way to get recovery.

Effective activities by going back to the basics of quality control that ALPS Electric has achieved significant success will be introduced in the presentation. It should be of assistance to the Japanese economic revitalization and to get complete recovery from the great disaster.

(Presenter Masato Hishiyama)



Kishio TAMURA is a chemical / material engineer and a manager at Konica Minolta. He has over 20 year experience in product design of toner and developer which are expendable supplies for high speed electrophotographic copiers and printers. One of the developer he designed had been a leading product in the office printer market for almost 15 years due to high durability and reliability.

He is also an expert of the robust quality engineering that is known as Taguchi Method. Including joint research, he has been given 10 research paper awards by the robust quality engineering society in Japan.

Now he is interest in the new technique of pattern recognition based on Taguchi Method and applies it positively to marketing fields. He has written some papers about marketing research utilizing the pattern recognition. In 2009, he wrote a technical book, "A beginner's guide to MT-system -The Newest Technique of Pattern Recognition- " (Japanese edition only).

Title

Potential of Pattern Recognition Technique for a Better Management of Product Design and Marketing.

Abstract:

To make a better decision-making as possible, we collect data as many as possible. However, may we utilize the data at the maximum?

Now, we have 2 options for making a better decision. One is to collect more data with additional cost, another is to treat collected data as the pattern without additional cost.

Of course, we can take both options, but I strongly propose focusing the pattern and trying to make a better decision before taking cost.

To make a decision from a pattern is called "pattern recognition".

Actually, "pattern recognition" differs from multi-dimensional data processing. The significant point of pattern recognition is to utilize primary and combine data (secondary, tertiary, ...). Including machine-learning, almost all of multi-dimensional data processing treat many data but discretely.

Today I focus on "MT-system" that is one of the few methods of pattern recognition. I introduce some practical studies (e.g. sales forecasting, product planning) with MT-system and show a potential of it as a pattern recognition technique.



Yusuke YAMAZAI is senior general manager of Institute of Technology of SHIMIZU CORPORATION. He has been taking charges of corporate R&D strategy and projects. His current research is construction innovation, computer integrated construction, strategic project management, sustainable building/construction systems and future smart cities, performed under collaborations with universities, national research centers and companies of different areas. He serves as director of International Institute of Construction Technology Information and director of Association for Sustainable Building Systems. He also works as visiting professor at Shibaura Institute of Technology (Sustainable Building Systems), lecturer at Keio University (Building Construction System) and lecturer at Chiba University (Production System for Urban Facilities).

Title

Product Lifecycle Management in Sustainable Building/Construction Projects

Abstract

Recent sustainable buildings require high performance of durability and quake resistance in structure, flexibility in spaces, compatibility of components, energy-saving, low-carbon and ease of maintenance in operation, in in-service period of more than 100 years. Therefore construction industry focuses efficient applications of Building Information Modeling (BIM) to building lifecycle management, from earliest conception, design/engineering, construction, operation and maintenance, to demolition. The talk presents concept of sustainable building/construction systems, related research and technology development activities, and BIM applications in sustainable building/construction projects. Also future direction of building lifecycle management is to be proposed.