



**Asia-Pacific
Economic Cooperation**

2008/SMEWG/SYM/022

Agenda Item: PD

Proposal of the Project “A Collaboration Network”

Purpose: Information
Submitted by: Vietnam



**APEC Symposium on Improving Market
Access for ICT Outsource SMEs
Hanoi, Vietnam
27–29 October 2008**

Proposal for ICT SMEs Collaborative Network

Pannel Session

APEC ICT-SME's 08 Symposium Organising Committee

APEC Symposium on “improving market access for ICT outsource SMEs”

Sofitel Plaza Hanoi Hotel, October 27-29, 2008 – p.1

Objectives

- To help the APEC-region's ICT SMEs to access the ICT outsourcing markets by providing a necessary links and information of the markets and business opportunities
- To provide a forum for experience exchange and to give recommendation/instructions for the efficient cooperation among ICT SMEs
- To provide information as to guide ICT SMEs on how to improve the competitive capacity of ICT SMEs

Sofitel Plaza Hanoi Hotel, October 27-29, 2008 – p.3

Motivations

- SMEs in both developed countries and developing countries have some difficulties in finding partners for outsourced projects because of the lack of information and contacts
- Not clear understanding about outsourced projects, not only outsourced software, but also a software components (incomplete software)
- High QoS is always a difficult requirement from outsourced project, outsourcing high quality software is more difficult to build since it is done remotely with the lack of understanding the customer requirements and needs
- Language Barrie for non-English speaking countries in outsourcing

Sofitel Plaza Hanoi Hotel, October 27-29, 2008 – p.2

Contents for Collaboration

- Information sharing: The member SMEs can share
 - Information of the markets, business opportunities
 - Necessary information about the potential partners for ICT outsourced projects
 - Experiences on business development
- Shared channels to communicate with government agencies and seek for supports from the APEC secretariat
- Technical supports for improving the competitive capacity of ICT-SMEs (standardization, information on new technologies and tools, QoS improvement)

Sofitel Plaza Hanoi Hotel, October 27-29, 2008 – p.4

Form of Collaboration

As usual, the physical collaborative network consists of a set of nodes connected via communication channels.

- Nodes: Network members, any ICT SMEs and Government agencies, training service providers, ICT product traders
- Edges: supported by the Internets and other communication media
- Information centers: special nodes, distributed over the network for the comfort of maintenance

Initial Services provided: portals, ICT SME forum, Collaborative Network website, databases, repository of useful information, links, and contacts.

Sofitel Plaza Hanoi Hotel, October 27-29, 2008 – p.5

Network Administration

- A technical support and administration team from each economy
- Virtual Office
- Cost for installing and maintaining covered by the local government and APEC Secretariat
- Information sharing policies have to be developed

Sofitel Plaza Hanoi Hotel, October 27-29, 2008 – p.6

Discussion Issues

- Is such a collaborative network really needed by SMEs in APEC economies?
- Enhancement of the network operation, how to keep it alive, how to make it satisfied by SMEs, how to make it more than a repository of useful information, links, and contacts
- What are the administration and technical supports for the network
- The role of local governments in maintaining and controlling

Sofitel Plaza Hanoi Hotel, October 27-29, 2008 – p.7



**Asia-Pacific
Economic Cooperation**

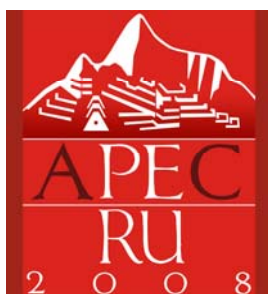
2008/SMEWG/SYM/023

Agenda Item: PD

Presentation of Kansai Economic Federation on Embedded Software Industry

Purpose: Information

Submitted by: Japan



**APEC Symposium on Improving Market
Access for ICT Outsource SMEs
Hanoi, Vietnam
27–29 October 2008**

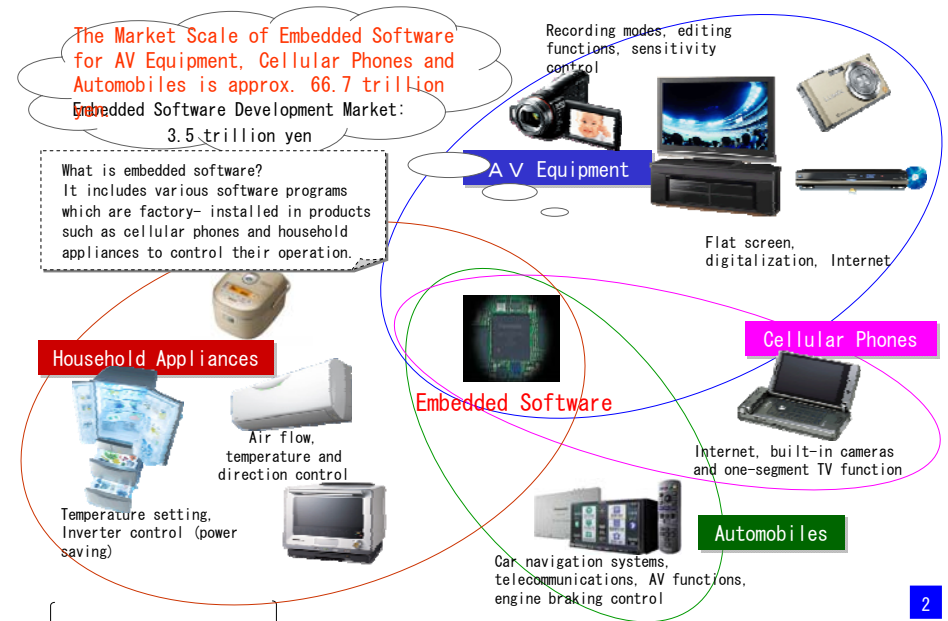
Initiatives for Kansai's Industrial Revitalization

Promotion of the Embedded Software Industry by Industry-Government-Academia Collaboration

October 29, 2008

Yoshiyuki MIYABE,
Leader, Working Group III,
The Committee for the Promotion of Embedded Software Industry

Embedded Software: A Driving Force for Industrial Competitiveness

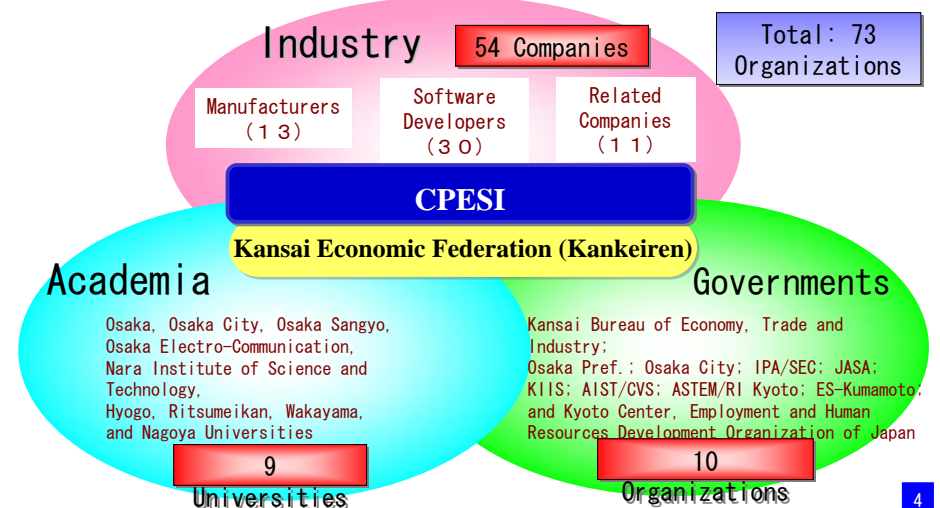


Efforts for Industrial Revitalization in Kansai

- Information appliances and cellular phones have contributed largely to Japan's recent economic growth. The functionality and performance of such products depend on the quality and performance of the programs embedded in them (embedded software) and the need for better embedded software is expected to grow in the future.
- In Kansai, there are many prestigious universities and leading manufacturers and medium and small companies engaged in the information industry. Also since Kansai has deep cultural and industrial relations with Asian countries, it has an advantage in terms of software development.
- Taking full advantage of these strong points, Kansai should accumulate embedded software development resources in addition to its efforts to promote the robotics, biotechnology and information appliance industries. This will enhance Kansai's industrial competitiveness and Japan's

Establishment of the Committee for the Promotion of the Embedded Software Industry (CPESI)

Under Kankeiren's leadership, the industry, government and academia jointly established the Committee for the Promotion of the Embedded Software Industry on August 6, 2007.



Issues for the Embedded Software Industry in Kansai

Human resource development is an urgent issue.



【Manufacturers】

- Employment of excellent students
- Intensified efforts for human resource development
- Product competitiveness enhancement
- Increased productivity in software development
- Cooperation with offshore developers



【Universities】

- Human resource development to meet industrial needs
- Improvement in educational curricula and materials
- Progress in software engineering

【Software Developers】

- Adequate staffing
- Employee education
- Contracts/subcontracts
- Competition with rivals



【Others】

- Multifaceted support system

5

Human Resource Development by Industry-Academia-Government Collaboration in Kansai

A school for advanced embedded software engineers, "Kumikomi-Tekijuku," was opened in July 2008.

- Nurturing system architects with empirical knowledge and skills as leaders in embedded software development.

Industry

Working group members from Daikin Industries, Panasonic and other companies participated in the compilation of a training program.
> Training program which reflects industrial needs

Academia

Cooperation of Universities: Osaka (IT Spiral), Hyogo, Nagoya (NEXCESS), Kyushu (QUBE)
> Compilation of a systematic training program

Governments

Kansai Center, National Institute of Advanced Industrial Science and Technology (AIST) offered training facilities.
> Industry-Academia-Government Collaboration System

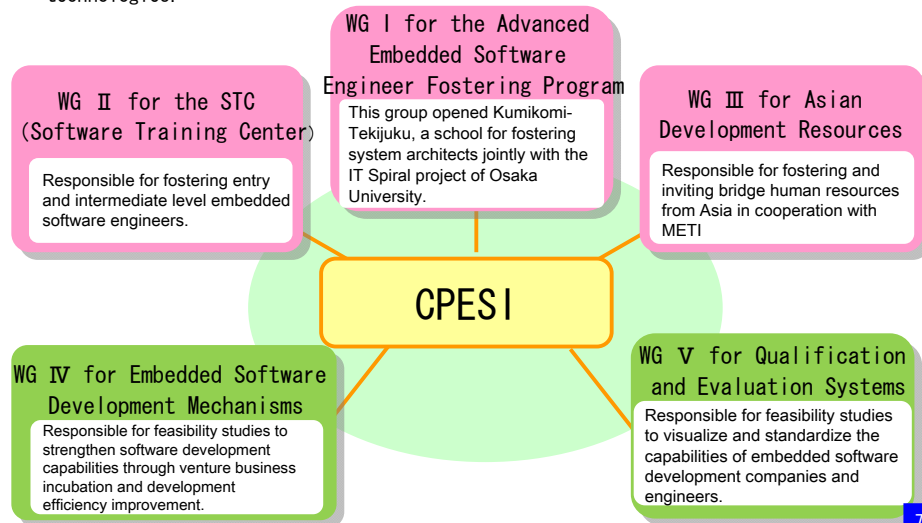


<http://www.kansai-kumikomi.net/>

6

Organization of the CPESI

Five working groups started efforts to address various issues for the promotion of the embedded software industry including human resource development, development efficiency improvement, business incubation and *mieruka* (visualization) of technologies.



7

Working Group III for Asian Development

Resources

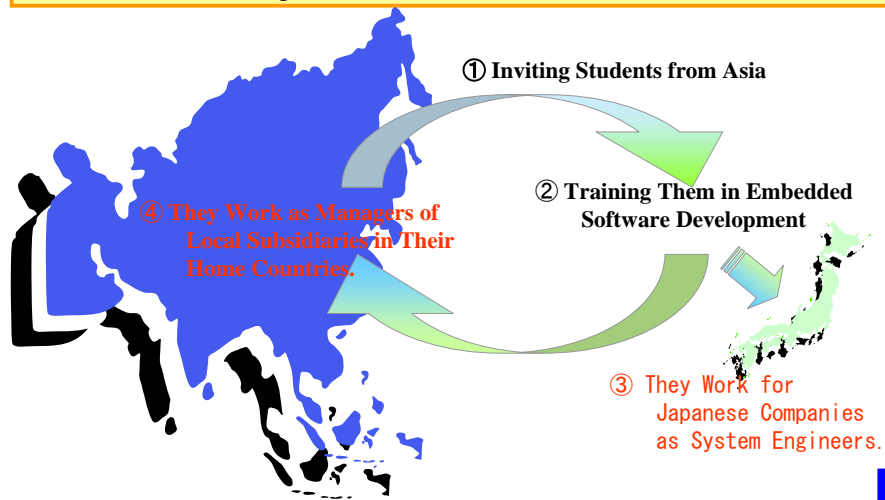
The group works for a mechanism which enables Asian students as bridge human resources to take leadership in software development in Japan.

- Overseas Field Research
 - Planning and implementation of fields studies in China and Vietnam
 - Surveys of the situation of embedded software companies and Japanese language education in Asia
- Cooperation with Ritsumeikan University
 - Workshops and internships in cooperation with Ritsumeikan University which promotes the Project of the Development of Highly Specialized Foreign Students under the sponsorship of METI's Asia Human Resource Fund
 - Plan to establish a follow-up system after the end of the project
- Surveys for Asian Human Resource Development
 - Surveys of websites in Asian countries
 - Surveys of the Asian human resource development methods

8

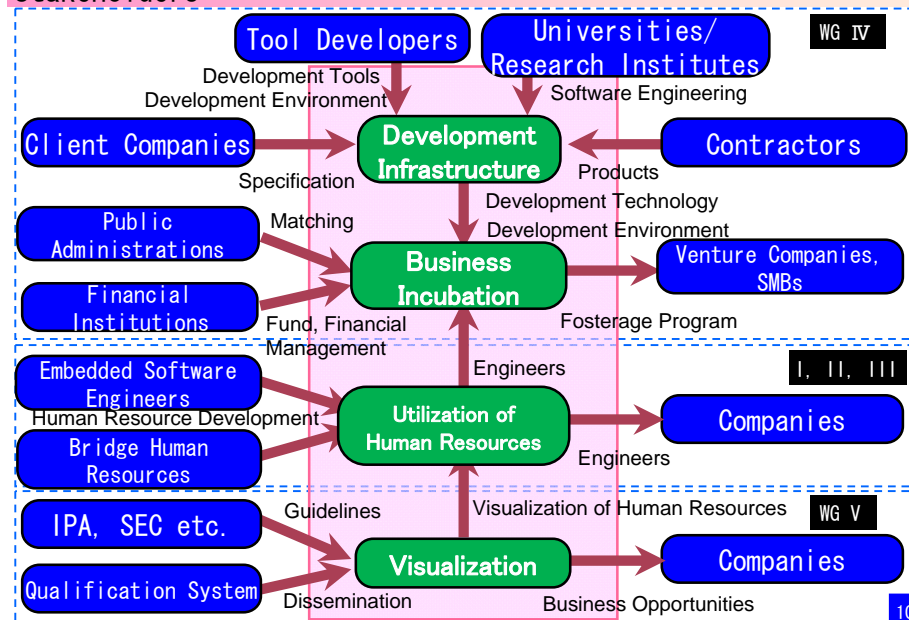
Promotion of Offshore Software Development by Fostering Bridge Human Resources

- To address the issue of shortage of engineers by inviting excellent students from Asia to Japan and training them as bridge human resources for offshore software development
- To take full advantage of METI's Asia Human Resource Fund (2007-)



9

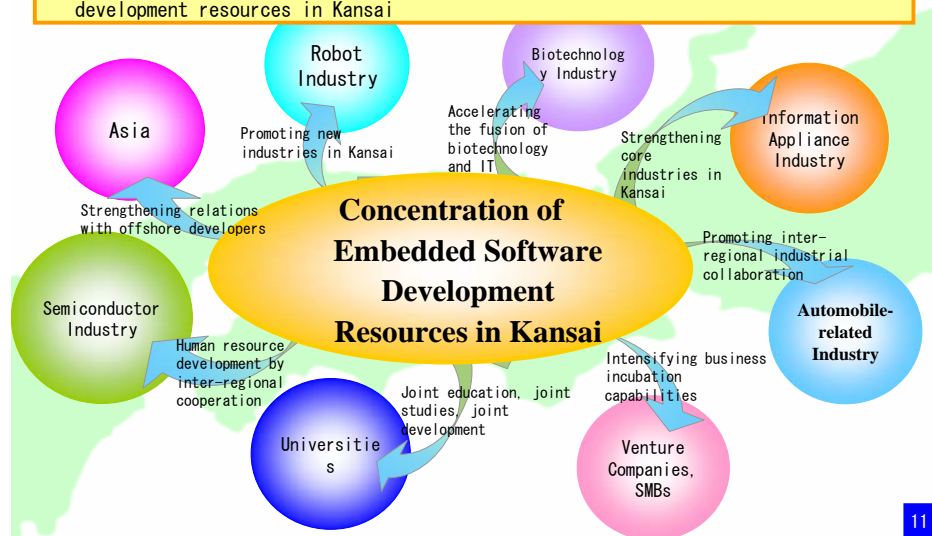
Relations between the CPESI and Stakeholders



10

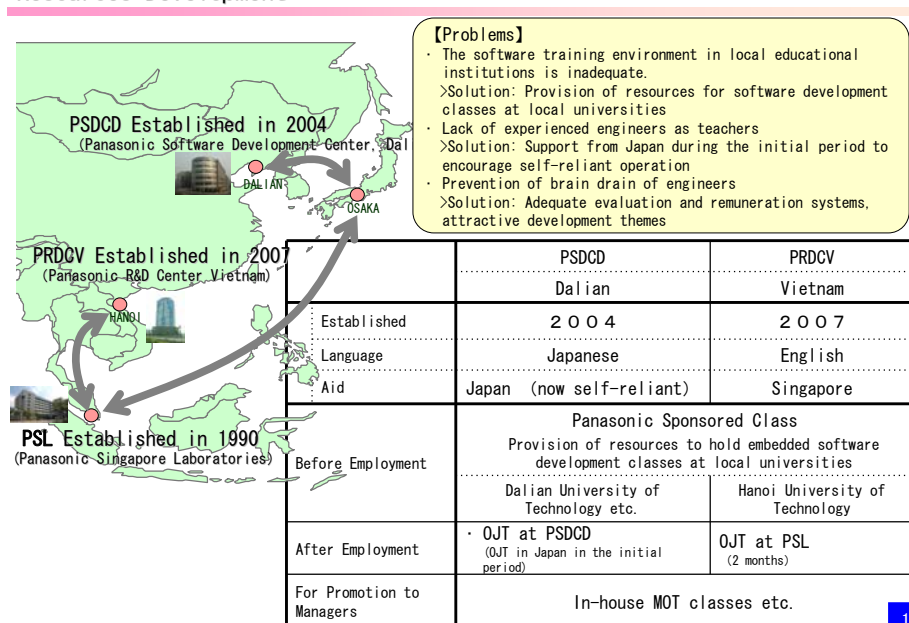
Future Prospects

- Industrial competitiveness enhancement and industrial revitalization in harmony with Asian economic growth
- Spread effect on various industries by concentration of embedded software development resources in Kansai



11

Panasonic (Matsushita) Group's Development Bases and Human Resources Development



12