Software Industry in Mongolia

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JMITA (Japan Mongolia IT Association)

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Briefly about Mongolia

- Nomadic people who lived in steppes from ancient time
- Today`s Mongolia - World`s Top level Democratic Country
- Mongolian people are very talented in natural sciences
- IT Profession is very popular
Results of International Mathematics Olympics

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Software Industry: Brief Overview in Mongolia

- Number of SW companies - 60
- Number of programmers - 1000
- Universities preparing IT specialists - 20
- Students for IT related profession - 7000
- Number of graduates annually - 450
Domestic Major Software products

- ERP Software
  - Accounting packages, University Management systems and etc.
- Banking Systems
- State Customs System
- Civil Registration System
- Insurance Company System
- e-commerce
- Game software
- etc.
Technology

- Microsoft Technology

- Java technology
  - J2SE (Core/Desktop)
  - J2EE Enterprise/Server
  - J2ME (Mobile/Wireless)
  - Java Web Services
  - Other Java Technologies

- Windows Programming
  - Delphi, Visual Basic
  - Visual C++, Visual C

- Database technology
  - Oracle
  - Microsoft SQL
  - MySQL Internet programming
  - php, jsp, asp

- Web programming
  - Flash - HTML, DHTML, CSS
  - JavaScript, XML

- Platforms
  - Windows
  - Linux
  - FreeBSD
Recent Developments in ICT sector

- National IT Park established
- ICT Authority established
- e-Mongolia Program: Asian top 10 by 2012
- e-Government Master Plan draft
- Software Outsourcing Business is starting
- Encouragement mechanisms made by Government (VAT exemption for SW companies and HW)
- IT profession is becoming more attractive
Software Outsourcing Business

Value

Japan, Switzerland, USA, Canada, Korea

IT Consulting

Software Development

Call Center, Customer Service Centers, etc

Data Entry & Data Processing

A few companies with Japanese Market
Our experiences in Outsourcing
Our experiences in Outsourcing

- Technological skill is sufficient
- Lack of a proper Process Management and Project Management
- Cultural Barrier
Resources we have:

- Natural science background
- Language ability
- Open minded harmonizing ability with other cultures
- Good technological resource
- Learning Ability
- Good Team Play skill
Future imagination of the Industry

- 10,000 engineers
- 200 software companies
- Annual Revenue at least 100,000,000 US$
Strategy SW outsourcing

Quality

We have limited but high quality human resource.

Japanese market

Japanese Language is most similar language to the Mongolian.
Good relationship with Japan.
Cultural advantage.
Gain the knowledge through direct experience.

Improvement on Language, management and marketing skills, and cultural knowledge.
What to do?

- **Well determined Government Policy**
  - Regulatory encouragement
  - Master Plan for SW Outsourcing
  - Increase capacity of the Industry
  - Support for Human Resource Development
  - Support for Company Development

- **Improve educational quality**
  - Collaboration of academic and industrial organizations
  - Productive training

- Research and development

- **Improve companies’ professional level**
  - Company cooperation
  - Individual Skill
What to do?

Academic
- New Curriculum
- CMMI, ISO 9001
- Collaboration with Industry
- R&D
- English Language education

Gov
- Strategy
- Tax Policy
- Standardization
- Infrastructural Support
- CMMI, ISO9001

Industry
- SW Dev. Process Management
- CMMI, ISO9001
- SW Project Management
- Joint R&D Project with Academic Organization

20 Universities other Research Institutes

MIDAS/MONITA JMITA
Movements towards IT Engineers Examination

- Aug 2002, Bilateral Conference on IT cooperation, hosted by CICC
- January 2003, IT sector`s representatives visited to Japan and studied the Examination
- Sep 2004, CICC on-site training on FE was held in Ulaanbaatar
- Sep 2005, AOTS on-site training projects were held for FE and FEIT courses
AOTS Training Projects on FE and FEIT courses

- 30 people attended for FE course
- 15 people attended for FEIT course
- 100% + 1 graduation
- Average achievement for morning exam - 48%
- Average achievement for afternoon exam - 68%
Working group established by ICTA`s Chairman`s Resolution for the localization of IT Engineers Examination.

The Working group is planning to implement its goal within 1 year.
Cooperation with Japan and other countries

- G to G cooperation
- Cooperation on Education
- B to B cooperation
- Dispatch Engineers (based on agreement)
- Direct Investment
- Experience sharing with other ITEE localized countries
- Continuation of the training programs (demand is high)
- Translation of training textbooks into Mongolian (copyright issues)
Thank you for attention
The end

is the beginning