Software Engineering and Software Development in Thailand

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Agenda

◆ **Software business in Thailand**

◆ **Software industry promotion**

◆ **Software process improvement**

◆ **Software research directions**

◆ **Conclusion**

Software Business in Thailand

- Software industry is considered an important strategy of the country

- Each year we have to spend a lot of money purchasing software licenses

- However, there seems to be a lot of software piracy as criticized by BSA

Thai Software Business

- Started at least 30 years ago

- Still not yet firmly established

- Mostly work on application packages

- Some work on software package installation

- Only few work for exports

Problems in SW industry development

- **Computerization rate is not high enough**

- **Lack of good Thai software packages**

- **Lack of confidence in Thai software products**

- **Lack of capable graduates**

- **Lack of effective Policy Chain**

- **Lack of true supports from the Government**

National IT Plan－IT2000

◆ **Emphasized in three missions**

- ■ **Investment in IT Infrastructure**

- ■ **Investment in IT Education**

- ■ **Development of IT for improving Government services**

Graduates in Computer Related Fields

Degree programs	2538	2540	2541
Bachelor	1,413	1,747	2,815
Masters	242	401	461

Not included Rajabhat and Raja Mangkala

Institutes

Vocaional Graduates

Vocational education has two majors

	2539	2540	2541	2542
Business Comp	4,384	5,206	5,645	7,036
Electronics	3,938	4,040	4,543	4,993

Salary VS HW Expenditures

Budget Year	2540	2541	2542	2543
Salary	232,457	244,982	257,908	268,548
HW	4,337	3,756	1,383	1,618
%	1.87	1.53	0.54	0.60

IT2000 Assessment

- **Not understood by all sectors**

- **Lack of supports**

- **Crippled by economic recession**

- **No Champion**

- **Now a new IT Strategies have been developed and all departments are required to submit a new ICT plan**

Some Developments

- Software Park has been approved by the Cabinet and started within the umbrella of NSTDA

- Not fully supported as planned

- Struggled to survive and become SW leader

- Future? Not certain because no commitment is obtained from the Government

OFTWARE PARK
THAILAND

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INTRODUCTION
OF SOFTWARE PARK

Software Park Thailand, a government agency under National Science and Technology Development Agency was established to stimulate the development of Thai software industry, push it towards a sustainable level and provide it the means to survive in rapidly changing global digital economy.

Software Park Thailand and its four integrated departments has officially taken upon itself the earnest endeavors

- to offer state-of-the-art infrastructures and investor-friendly environment that nurture young software entrepreneurs during the start-up period;

- to broaden knowledge and enhance skills of Thai IT professionals through various kind of educational activities and;

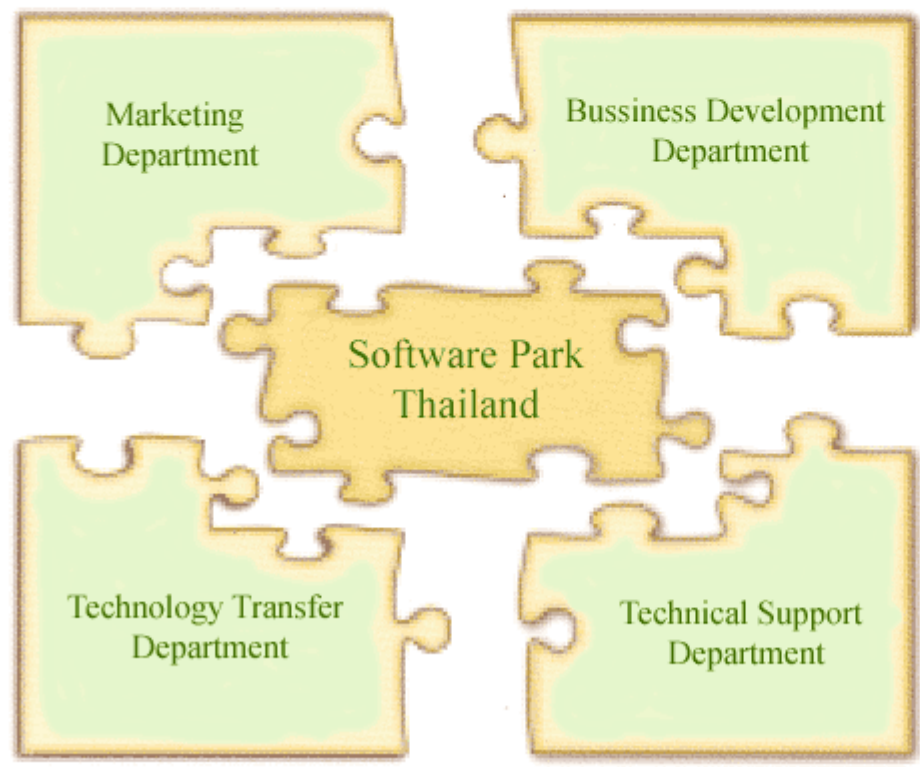- to establish a business-to-business exchange from both national and international basis

services
SOFTWARE PARK

Software Park Thailand has divided its operation into four integrated departments striving towards an establishment of unique cutting edge that gradually allows an additional acceleration of a development in the entire Thai software industry.

swpark.or.th

esource Centers

ORACLE
ademic Initiative

HP Mobile
E-Services Bazaar

IBM.
Porting Center

Marketing Department

Bussiness Development Department

Software Park Thailand

Technology Transfer Department

Technical Support Department

Internet

Ministry of ICT

◆ **Approved by Cabinet and enacted**

◆ **Started to function in October 2545**

◆ **Directions?**

- **We are waiting to see.**

◆ **Actions?**

- **Hope that they will be significant.**

IT Education

◆ **Restructuring state universityies**

◆ **Development of IT graduate degree programs**

◆ **Popularizing IT jobs**

◆ **Expanding scope and fields**

◆ **Problems ― quality and attitude towards programming**

Software Directions

- ◆ **Common software for government sectors**

- ◆ **Educational software for schools**

- ◆ **Software packages for SME**

- ◆ **Multimedia software**

- ◆ **Internet and Web services**

- ◆ **Distributed databases and systems**

Software Process Improvements

◆ **Urgently need**

- **Software standards**

- **Software process standards**

- **Data standards**

- **Education about these standards**

- **National acceptance**

Capability Maturity Model

◆ **Developed by SME**

◆ **SW Park encouraged SW companies to adopt**

◆ **Six CMM authorized trainers**

◆ **Three CMM authorized Lead Assessor**

◆ **Four more to be authorized**

Where shall we go?

- **Close participation among Thai lecturers**

- **Development of Standards**

- **Brainstorm on SW Practice directions**

- **Brainstorm on SW research directions**

- **Dissemination of research results**

Conclusion

- Software engineering and software practice in Thailand are still lag behind other countries

- Need to strengthen through education programs

- Need to develop more capable lecturers

- Need to work with ICT Ministry

- Need to consider standards and certification

- Need to have private sector participation