Country Report 2007 on eEverything from Thailand

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Abstract

Computerization in Thailand was initiated in the year 1960 when HM the King visited a computer plant in the US. The Royal Thai Cabinet approved national IT policies, starting with IT 2000 and followed by IT 2010. This paper presents a brief history of eASEAN, which encouraged Thailand to establish eThailand, with the five strategies, namely eGovernment, eCommerce, eIndustry, eSociety, and eEducation. Samples of the five strategies such as eRevenue, eAuction, eCitizen, eHealth, eNews, eLibrary, eUniversity, eAutomation, eTravel, eFish, eThaiTambon, eMarketPlace, and eBusiness are given. Also presented are eCourt, and eParliament.

1. Introduction

In the year 1960, there was no computer installed in Thailand, Singapore and Malaysia. In July 1960, HM the King provided IT inspiration for Thailand by visiting IBM computer factory in San Jose, California. HM the King’s Vision in visiting IBM at that time is a highly significant inspiration for Thailand to think about using computer in social and economic development of Thailand to be at par with developed countries. An institution which followed HM the King’s lead was SEATO Graduate School of Engineering at Chulalongkorn University, which later became AIT. The initial stage of computerization in the Thai public sector started in 1964 when two mainframe computers were first installed at the National Statistics Office for processing census data, and at the Faculty of Commerce and Accounting in Chulalongkorn University for education programs. Computerizations in Thailand were quickly expanded as can be seen in the number of Internet users increasing steadily from the year 1991 to 2007 [14]. Prof. Srisakdi Charmonman is the first Thai to use the Internet when it was introduced in the US in the year 1969 when he was the Director of Graduate Studies in Computer Science at the University of Missouri. The Internet came to Thailand in 1987 with dial up connection at AIT and Prof. Srisakdi Charmonman, in his capacity as the President of AIT Alumni Association, was among the first group of Thais to use the Internet in Thailand. The first leased line connection was established at Chulalongkorn University in 1992 with the bandwidth of only 9,600 bps. The international bandwidth from Thailand has increased from 9,600 bps in the year 1992 to 7.6 Gbps in the year 2006, to 17.3 Gbps in 2007, and expected to be 30 Gbps in 2009.

Internet Users in Thailand.

Many papers have been written and many webs may be found concerning computerization and related matters in Thailand [1-18].
2. eASEAN, eABC and eThailand

An important factor which led to eThailand was eASEAN. The Association of South East Asian Nations or eASEAN was established in Bangkok on August 8, 1967 [6] with 5 member countries, namely, Indonesia, Malaysia, Philippines, Singapore, and Thailand. Brunei Darussalam joined on 8 January 1984, Vietnam on 28 July 1995, Laos and Myanmar on 23 July 1997, and Cambodia on 30 April 1999.

A high-level public-private sector advisory body to develop a broad-based and comprehensive action plan was initiated by eASEAN in September 1999. It was called eASEAN Task Force. Prof. Dr. Srisakdi Charmonman was named a member from Thailand in his capacity as the Project Manager of the eCommerce Pilot Project of the Ministry of Commerce and the Founder and Chairman of KSC, the first and the largest Internet Service Provider at that time. ASEAN was the first to create a regional ICT Development initiative. As a matter of fact, after the establishment of eASEAN in 1999, eEurope was created in the year 2000, and eAPEC in 2002. eASEAN was also ahead of the G8’s DOT Force and the UN ICT Task Force.

ASEAN initiated another project called “eABC (eASEAN Business Council)” in June 2003 and it was formally established in 2004 [6,15]. The Ministry of Information and Communication Technology appointed Prof. Dr. Srisakdi Charmonman the Head of the Delegation from Thailand and later he was voted Chairman of eABC [15]. With the encouragement of ASEAN for all member countries to promote the utilization of the Internet, eThailand was initiated in the first national IT policy of Thailand, called “IT 2000”, which was approved by the Cabinet in the year 1966.

<table>
<thead>
<tr>
<th>YEAR</th>
<th># INTERNET USERS</th>
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<tbody>
<tr>
<td>1991</td>
<td>30</td>
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<td>1992</td>
<td>200</td>
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<td>1993</td>
<td>8,000</td>
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<td>1995</td>
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<td>1996</td>
<td>70,000</td>
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<td>9,909,000</td>
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<tr>
<td>2006</td>
<td>11,413,000</td>
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<tr>
<td>2007</td>
<td>13,416,000</td>
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</tbody>
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There are 3 pillars and 3 main pilot projects in IT 2000. The three pillars are national information infrastructure, human resource, and good governance. The three pilot projects are:

- SchoolNet to provide Internet accesses to schools.
- GINet to develop Government Information Network.
- ITlaws to draft IT laws or Cyber Laws to submit to Parliament to provide legal framework to support IT applications in Thailand.

The second phase of Thailand national IT policy is IT 2010. The main purpose was to move Thailand into the Knowledge-Based Economy (KBE) and Knowledge-Based Society (KBS).

IT 2010 was approved by the Cabinet in March 2002. It recommended five strategic flagships for Thailand.

- eGovernment as the main driver for the five strategies.
eCommerce and eIndustry for the Knowledge-Based Economy.

eSociety and eEducation for Knowledge-Based Society.

3. eGovernment

The concept of eGovernment includes the concept of Public service delivery through the Internet and legal infrastructure to support the usage of the Internet [17].

Thailand has made many progresses in the sense of providing government services through the Internet. In some countries, such as Singapore “eCitizen” is used to stand for “eGovernment”. For example “eCitizen” in Singapore is the gateway to all government services in Singapore. With IT 2000, the Thai Government had pushed for all agencies to implement eGovernment. The Government had spent approximately 90,000 million baht (about 2,600 million US$) for eGovernment projects during the year 2001 to 2006. In the year 2002, the Ministry of Information and Communication Technology was established to be in charge of IT in Thailand.

3.1 eRevenue

The first example of eGovernment in Thailand is eRevenue for filing income tax returns through the Internet [18]. About 80% of those who have to file income tax returns at the beginning of 2007 used the Internet. It should be noted that the 80% figure is larger than that in other countries. The main goal and objective of eRevenue is to create service-oriented organizations by providing professional services to citizens to improve efficiency and fairness in tax collection by increasing utilization of modern information technology. The eRevenue services include the followings:

1) Tax Identification Number (TIN), and Personal Identification Number (PIN).

2) VAT Refund for Tourist Information.

3) VAT Registrant Information.

4) VAT Exempted Jewellery Business Information.

5) Personal Income Tax Calculation Information.

6) Tax Collection Summary Information.

7) Joint Venture and Foreign Company Information.

8) Corporate Income Tax Information.

The list of eServices available for download contains tax return forms, application forms, tax calculation program, other supporting programs in conjunction with online filing of tax returns, and eRevenue Code (only in Thai language).

3.2 eAuction

On October 1, 2002, the Thai Cabinet passed the resolution that every department and state enterprises must make procurement through eAuction and report the progress of the implementation to the Office of the Prime Minister every 3 months. The resolution was effective in January 2003. The purposes of eAuction are:

- To improve the procurement process in the public sector in order to protect collusion and corruption.
- To stimulate the investment and economy.
- To increase efficiency.
- To reduce the cost of procurement.

As of the year 2007, eAuctions are widely used by government departments, hospitals, universities, and companies.

As an example in the year 2007, the government used eAuction for construction projects, such as for buildings, bridges, and irrigation including 15,864 projects, and saved 13,982 million bath.
3.3 eCitizen.

eCitizen is one of the goals in the development to eGovernment. The Ministry of Information and Communication Technology announce the “eCitizen Project” on 1 April 2003. The goal of eCitizen [16] is for development and improvement of a service network to become the “Single Point Service Center”. 9 January 2004, the Single Point Service Center was announced as a pilot project. The Ministry of Information and Communication Technology joined with other departments of government and private sector such as the Revenue Department, the Department of Business Development, the Department of Employment, the Department of Provincial Administration, the Social Security Office, TOT Corporation Limited, CAT Telecom Public Company Limited, and Bangkok Metropolitan Administration.

www.citizen.go.th

“www.citizen.go.th” provides services such as tax information service, law information service, family planning information service, social welfare information service, career information service, and education information service.

4. eSociety

The purposes of eSociety are bridging the digital divide, quality of life, culture, health, and public participation.

From IT 2010, the targets for eSociety in Thailand are as follows:

- By 2010, all Thai people have equal access to and utilization of Information Technology at an affordable price.
- Affordable price of IT to lead to professional development, increase in quality of life and improvement in the environment.
- Local content of webs to account for at least 10% of total content developed in Thailand.
- To compile, process and establish a wisdom network of:
  - distinguished thinkers.
  - local philosophers.
  - local wisdom to create international knowledge pool.
- By 2010, at least 50% of Thai villages are to be learning communities, where knowledge is continuously developed and strong economies are formed.

As of the end of the year 2007, about 13 million people in Thailand are using the Internet. Although the cost of access to the internet has significantly reduced from that when ISPs started offering connection in Thailand, more people should be encouraged to use the internet. There will be the “International Conference on society 2008” during March 27-29 in Bangkok, Thailand. Topics include:

- Practice and Cases in eSociety.
- Systems and Technologies in Society.
- Applications and Integration of eSociety.
- Cyber Law and Cyber Crime.
- Intellectual Property.
- Social Communications on the Internet.
- Internet Security.
- Trust and Privacy Issues in Cyber Society.
- Online Friendship and Virtual Relationship.
4. eHealth

Instead of “Sex”, “Nude”, “Pornography” and some such, the most searched for term in 2007 is “eHealth”. In eHealth webs, one can find information about health such as, News & Events, Plan & Activities, Publication, Media, and Funding.

The users of eHealth webs can read the latest news, namely, Tobacco Consumption Control, Alcohol Consumption Control, Physical Activities Promotion, and Health Risk Factors.

4.1 eHealth

The first computer installed in Thailand in the year 1964 was at Chulalongkorn University to be used in education sector. All universities in Thailand now use computers and the Internet in all major functions including teaching, research, educational services, and promotion of Thai culture.

The SchoolNet Project at NECTEC, which was later transferred to the Ministry of Education, has provided Internet access to schools all over the country. HM the King’s Distance Learning Foundation has provided education to millions of children not only in Thailand but also in neighboring countries. At the university level, Thailand is the first country in the world to offer the eLearning program of PhD in eLearning Methodology, i.e. at the College of Internet Distance Education of Assumption University. The College is located at Srisakdi Charmonman IT Center (www.SCIT.au.edu) with the construction value of about 650 million baht, 12 floors, 12,000 square meters more than 1,000 computers connected to the Internet.

www.thaihealth.or.th

With “www.thaihealth.or.th”, there are physical activity calendars for the Thai people who are interested in outdoor activities. The users can check about symptoms from website. Another purpose of eHealth is to develop social movement and the health system to increase the well-being of Thai people. The principle strategies are social mobilization, system development, healthy communities development.

4.2 eNews

The purposes of eNews are giving and updating news, providing an alternative to purchasing newspaper. There are topics, such as education, politics, sports, entertainment, and the like.

www.e-news.co.th
5.1 eLibrary

An important part of eEducation is eLibrary which may contain all kinds of publications and products. There are many eLibrary services in Thailand. An example is the National Education Network Project for the development of eLibrary.

www.nationallibrary.com

5.2 eUniversity

There are many universities in Thailand offering eLearning, such as, Assumption University, Chulalongkorn University, Mahidol University, Ramkhamheang University, and Rangsit University.

6. eIndustry


The Internet and computers are used in all the 9 industry clusters and only eAutoManufacturing will be presented in this paper. Also presented in this paper will be eTravel which is not a club or cluster in the Federation of Thai Industries but very important for Thailand.

6.1 eAutoManufacturing

Thailand ranked 15th in the list of top motor vehicle producing countries in the year 2006 with 1.194 million units. Toyota, which is the second largest motor vehicle manufacturing company in the world, got the Thai Board of Investment promotion privilege in the year 1962 and the first factory opened in the year 1964, the second in 1975, and the third in 1988. In the year 1997, HRH Princess Maha Chakri Sirindhorn graciously opened the fourth and the most modern automobile factory in Southeast Asia in Thailand. The Toyota factory employs advanced computerization
systems and processes, including the followings:
- Just-in-time which is the most sophisticated supply chain management system in manufacturing.
- Jidoka which is devices allowing workers to stop production to correct defects.
- Kaizen which is the system for continuous improvement.
- Andons which is visual controls to convey the state of work
- Poka Yokes which is low-cost, highly reliable devices to prevent defects
- Genchi Genbutsu which is the concept to station at least 50% of Toyota Information System workers at plant sites to work directly with operations.

6.2 eTravel.

One of the most important industries in Thailand is the travel industry. The main organization in charge is the Tourism Organization of Thailand (www.tat.or.th).

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www.tat.or.th
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TAT policy includes:
- to promote the tourism industry to be an important instrument in tackling the country’s economic problem, creating jobs for people as well as increasing income for the country.
- to promote and develop the operation on proactive marketing strategies for increasing the new markets as well as the niche markets.
- to promote cooperation in all levels domestically and internationally on promotion for the development of tourism markets.
- to aim at organization and management development as well as development of the human resources’ ability to create a capable driving force in the operation.
- to accelerate the development of a tourism technological system for accommodating business activities information (e-Tourism) on the Internet.

TAT’ services include:
- to supply information and data on tourist areas to the public
- to publicize Thailand so as to encourage Thai and international tourists to travel in Thailand.
- to conduct studies to set development plans for tourist areas.
- to co-operate with and supports the production and development of personnel in the field of tourism.

7. eCommerce

Provided in eCommerce are selling goods and services (not only finance, tourism and IT services, but also other industries) through the Internet. On July 13, 1998, the Ministry of Commerce appointed Prof. Dr. Srisakdi Charmonman Project Manager on eCommerce for Export with 7 committees namely, Public Relation and Training, Marketing, Consumer Protection, Taxes and Customs Duties, Shipping and Insurance, Payment and Security and Digital Signature and Certificate.

A hundred companies were selected for the pilot projects. After that many companies have been successful in eCommerce. A few examples will be given. eCommerce in
Thailand survey found that the value of Thai eCommerce rose 305,159 million bath in fiscal year 2006 and will hit 400,000 million bath in the future. More than 58 % is the value eAuction. B2B Market is 80,000 million B2C market is 47,000 million.

According to NECTEC Survey of 9,000 entrepreneurs
- 70 % of customers are afraid of fraud.
- 60 % of customers lose confidence.
- 56 % of customers are afraid of not receiving the goods.
- 49 % of customers lack confidence in payment.
- 42 % of customers steal credit card.
- 36 % of customers need to inform vender face to face.

Most favorite of eCommerce's products are Fashion, Cloths, Fabric and Leather 14.45 %, Tourism, Hotel and Restaurant 9.18 % and Computer and Applications 7.27 %.

7.1 eFish

The first example of eCommerce is “www.PlatuMahachai.com” selling the popular Thai fish called “Pla Tu”. The owner used to sell the fish at Ram Intra Road Km 8. He said he listened to Prof. Dr. Srisakdi Charmonman’s radio program, “Internet IT with Srisakdi Charmonman” on Radio Thailand FM 92.5 describing that a man and a dog can setup a website to sell goods. So, he set up a website to sell the fish abroad at 1 US$ each while the price in Thailand is much less and the revenue is hundred thousand per month.

7.2 eThaiTambon

The second example is www.thaitambon.com. The idea and concept for the construction of ThaiTambon.com was initiated in 1999. It aimed at a home page for Tambon or sub-district to encourage rural people to understand and use more Internet.
level. Thus more income will be distributed to rural people.
- ThaiTambon.com will help rural people to exchange information, ideas, and to improve.

In the web “www.thaitambon.com” there are more than 75,200 product categories. There are more than 34,500 OTOP product categories. There are any topics related to eCommerce.

7.3 eMarketPlace

The concept of web eMarketPlace was established in 2001 by the Department of Export Promotion of Ministry of Commerce and 5 private providers of eCommerce solution:
– Internet Venture Co.,Ltd.
– Psquare Network Co.,Ltd.
– Samart Internet Co.,Ltd.
– Thai Portal Co.,Ltd.
– We Thai Dot Co.,Ltd.

In the web “exporter.ThaiTrade.com”, there are more than 5,200 exporters in 17 categories.

exporter.ThaiTrade.com

In the web “www.emarket.sme.go.th” there are more than 6,200 exporters.

www.emarket.sme.go.th

In the web “www.e-talad.com”, there are more than 5,926 exporters in 400 categories.

www.e-talad.com

In the web “www.foodmarketexchange.com” there are more than 21,900 members.

www.foodmarketexchange.com

7.4 eBusiness

While eCommerce may be said to be front-end application of the Internet, eBusiness includes both front-end and back
end, emphasizing more on back end, such as, human resource, accounting, manufacturing, and so on so forth.

All large companies in Thailand do use eBusiness. For example, all the major banks such as Bangkok Bank (www.bangkokbank.com) use computers and the Internet in their back offices. All airlines including Thai International use eBusiness.

8. eCourt

The constitution of Thailand specified three branches of power, namely, Executive through the Cabinet, Legislative through Parliament, and Judicial through the Courts. The services related to the executive power have been discussed in eGovernment. Therefore, to make the picture more complete, eCourt and eParliament should be mentioned.

The main eCourt web is www.Judiciary.go.th, which includes court cases, courts information, judicial human resource management system, payroll systems, retired judges information system, correspondents systems, judicial management information system, judicial portfolio system, judicial data center, judicial library system, and judicial Internet system.

The Intellectual Property and International Trade Court also uses video conference for witnesses who cannot travel to Thailand.

9. eParliament

An excellent example of eParliament is in the US where the Senate and the House of Representatives have been highly computerized. In Thailand, computerization of Parliament started in 1991 with the following developments:

- In 1991, the Computer Division of Parliament was established to provide basic computer services.
- In 1992, Guidelines for ICT Policy were established.
- From 1995-1997, Computer network established and Data link with government agencies and private sector.
- In 2001-2003, Information Service and Access, such as, WiFi, Computers in meeting room, etc. Public Relations, Parliament Website for MPs and citizens and Website for youth.
- From 2004 to 2006, ISO 9002 for managing ICT System certified and IT personnel improvement,
- In 2007 Promote “eDemocracy” via the Internet.

10. Concluding Remarks
From the initiation of computerization of Thailand in the year 1960, Thailand has gone a long way to eEveryThing in the year 2007. This paper presented a brief history of eASEAN which encouraged Thailand to establish eThailand, with the five strategies, namely eGovernment, eCommerce, eIndustry, eSociety, and eEducation. Samples of the five strategies such as eRevenue, eAuction, and eCitizen for eGovernment; eHealth and eNews for society; eLibrary and eUniversity for eEducation; eAutomation and eTravel for eIndustry; and eFish, eThaiTambon, eMarketPlace, and eBusiness for eCommerce are given. Also presented are eCourt, and eParliament. More and more E’s will be developed in Thailand for the benefits of all parties concerned.

References


15. http://www.eABC.biz

