**Avudh Ploysongsang, Ph.D.**
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## EDUCATION

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| 2007 | Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration of Chulalaongkorn University |
| 1996 | Top Management Program (TMP), the Asian Institute of Management |
| 1995 | Mini MBA, Chulalongkorn University |
| 1984 | Texas Instruments Inc.: Management Training Programs |
| 1980 | Ph.D. (Electrical Engineering), University of Texas at Arlington |

## HONORS AND AWARDS

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| 1988-1989 | President, Thai Association of North Texas |
| 1988 | Vice President, Buddhist Center of Dallas |
| 1987 | Senior Member of Technical Staff, Texas Instruments Inc. |
| 1978-1979 | Rockwell International Fellowship |

## EXPERIENCES

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| 2007-Present | Advisor to the Standing Committee on Science and Technology, The Parliament, Thailand |
| | Director, Advance Energy Development Co. Ltd. |
| 2006-2007 | President, Software Industry Promotion Agency (SIPA) |
| 1993-2006 | Thaicom (Shin Satellite) Public Co., Ltd. Bangkok, Thailand |
| | Vice President-Business Development, Shin Satellite Public Co., Ltd.,(1999-2006)<br>Managing Director, C.S. Communications Co., Ltd., a subsidiary of Shin Satellite, (1994-1999)<br>Senior Manager, Commercial Department (Marketing and Sales), Shin Satellite, (1993-1994) |
| 1980-1993 | Texas Instruments Inc., Dallas, Texas, USA:<br>Senior Member of Technical Staff. |

Co-Chairman of Technology Committee, ATRWG-a joint
working group of DARPA (Department of Defense, USA)
and Defense Industry (1989-1993).
Program Manager, Defense Systems and Electronics Group (1983-1986).
Member of Technical Staff, Central Research Laboratory (1982).
Member of Technical Staff, Defense Systems and Electronics Group (1980-1983).

Dr. Ploysongsang sits on the board of directors of Advance Energy Development Co. Ltd., a company in the Shaiyo-AA group of companies, which has its main business in the green energy area particularly the biomass power plant EPC business. He is also an advisor of the Shaiyo-AA Group and an Advisor to the Standing Committee on Science and Technology of the Thai Parliament.

As an Advisor to the Standing Committee on Science and Technology, he works on helping raise the importance of the science and technology in the development of the country. In particular, he serves as a member of a subcommittee on advanced technologies attached to the said Standing Committee. He also serves as a member of a joint-subcommittee, of the Standing Committee on Energy and the Standing Committee on Science and Technology, to study the role of nuclear power plant in providing the stability of power generation in Thailand. For this function, he works on the strategy to resolve conflicts and obstructions in the nuclear power plant project in Thailand. Within these capacities, he serves as the lead author and editor of several reports of the Standing Committee and subcommittees. For examples, the report on Nuclear Research Facility at Ongkaraks and the report on the Nuclear Power Plant for the Security and Stability of the Electrical Power Generation in Thailand.

Now that his interest is in pushing the progress of Science and Technology, he is working on many issues relating to the elimination of the impediments to the advancement of science and technology in Thailand. He identifies these impediments as the lack of politicians' emphases on and understanding of science and technology and the mismanagement of science and technology. In November 2010, he represented the Thai Parliament at the Conclave of Scientist Conference in New Delhi, arranged by the UNESCO and the Zaheer Science Foundation, where he proposed the idea of having a position of Chief Technical Officer (CTO) at the level of the Deputy Prime Minister together with the establishment of the Congress of Science and Technology for improving the management of science and technology in a country.

During 2006-2007, he served as the president of the Software Industry Promotion Agency (SIPA). In that position, Dr. Ploysongsang had the responsibility to promote and expand the software industry in Thailand which has a very high potential to develop into one of major industries in Thailand. He made significant progresses in

many areas of software industry including embedded software and enterprise software.

As the Vice President-Business Development at Thaicom Co.Ltd., Dr. Ploysongsang had the responsibility to develop new businesses in the area of satellite telecommunications. He emphasized on his vision of the international business which included developing the strategy to expand the satellite business globally. The strategy involved the applications of the IPSTAR technology for services in various places outside the footprint of the current satellites of Thaicom Co. Ltd.

Previously, he successfully led a team to execute the merger of the Thailand top two ISP's, CS Communications and LoxInfo Services. The resulting merged company, CS Loxinfo Co.Ltd., became the largest ISP in Thailand, and later was successfully listed in the stock market with the IPO market cap of approximately THB 5 Billion. In that role, his tasks included the due diligence process, the development of the structure of the company with various holding companies and subsidiaries, the development of the shareholding structures, the development and the execution of the strategy to overcome various obstacles and pitfalls from regulation and tax issues, apart from promoting and maintaining the cooperation among various partners namely Shin, Loxley, SingTel and Citicorp.

Prior to that, he was the Managing Director of CS Communications, a JV between The Communications Authority of Thailand and Shin Satellite. In that capacity, he developed the business starting from a licensed uplink operator, serving the DTH operation, and an agent for Thaicom transponder services. The business expanded to a substantial investment (~USD 70 Million) in the Mobile Satellite Phone business (ICO). During the economic crisis starting in 1997, he successfully navigated the divestment in time before the bankruptcy of ICO. Thus, CS Communications became the only investor in ICO that recovered its investment.

Prior to the end of 1992, while still residing in the USA, he was recruited by Shinawatra Satellite which later became Shin Satellite and finally Thaicom Co.Ltd. He joined the company as a Senior Manager in charge of the Commercial Department and was responsible for the sales and marketing of the transponder and other services of Thaicom satellites. He successfully led the team to convince all VSAT operators and TV Broadcasters in Thailand, which were initially reluctant to use Thaicom satellites and demanding exorbitant compensations, to agree to switch and with minimal compensations. He successfully opened the first international market (Vietnam), and also helped promote the DTH satellite broadcasting system in Thailand, before helping the establishment of CS Communications.

At Texas Instruments Inc., as a Senior Member of Technical Staff in the Defense Systems and Electronics Group, and the Central Research Laboratory, he developed several advanced algorithms which later on won TI two contracts from the Department of Defense (DoD), both of which he became the program managers. He also managed a group of engineers and scientists in one of the R&D Laboratories of TI. In that capacity, he also coordinated with the US Government officials in the Department of Defense (DoD) and later held the position of the Co-Chairman of the Technology Committee of ATRWG, a joint working group of DARPA (Defense Advanced Research Program Agency) and the Defense Industry for the development

of the advanced systems for the applications in the defense systems. At TI he pushed forward the technical advancement in more than one fields and was recognized for his contributions and leadership in the advanced technologies by being elected the Senior Member of Technical Staff within a very notably short time.

His Ph.D. dissertation and the resulting publication* on the bandwidth reduction of the television signal using Discrete Cosine Transform (DCT) and Digital Pulse Code Modulation (DPCM), a predictive coding technique, had become the foundation for the development of the satellite TV broadcasting technology of today. It has also become a crucial part of the widely used MPEG standards for telecommunication applications.

*Ploysongsang et al, DCT/DPCM Processing of NTSC Composite Video Signal IEEE Transactions on Communications, vol. Com-30, No. 3, Mar. 1982, USA, p. 541-549.