ENGINEERING SCIENCES AND TECHNOLOGY (Technical Session)

ICT ROAD MAP IN ENGINEERING - SOFTWARE

Romeo G. Solis

Professor, Electrical and Electronics Department University of the Philippines Diliman, 1101 Quezon City

A roadmap is a layout of paths or routes that exist or could exist in some particular geographical location. The word "roadmap" is popularly used a powerful metaphor for plannning science and technology resources. Road maps are usually developed by a group of experts using complex methods. Elements which will be needed to create an Information and Communication Technology Roadmap for Engineering will be presented. The use and development of engineering productivity software, as well as opportunities in embedded systems design will be considered.

Keywords: roadmap, engineering productivity software, metaphor

ICT ROAD MAP IN THE PHILIPPINES: INFRASTRUCTURE

Academician William T. Torres

President, Mosaic Communications, Inc., The Peak Tower, Makati City and Member, National Academy of Science and Technology

This presentation shall attempt to specify an information infrastructure - computer networks with associated ICT resources - to address the information and communication requirements of professionals and technicians involved in various engineering activities all over the Philippines. Whatever ICT resources are available today are difficult to access by and share among a large number of engineering practitioners. The Internet and the World Wide Web can be barnessed to overcome a lot of these difficulties; however, there is a need to build upon this basic layer of infrastructure, other layers (e.g., content and services) to facilitate the effective sharing of expensive ICT resources. The presentation shall also discuss ICT-related initiatives of the Information Technology and Electronic Commerce Council (ITECC) relevant to the topic,

Keywords: infrastructure, ICT resources, internet, world wide web

ICT ROADMAP IN THE PHILIPPINES: THE ACADEME

Academician Reynaldo B. Vea

President, Mapua Institute of Technology, Muralla Street, Intramuros, Manila and Member, National Academy of Science and Technology

A road map shows the links among various points in geographic space. ICI Road Map for Philippine technology schools would serve an analogous purpose.

Philippine technological schools continue to suffer from a severe paucity of resources. State schools pale in comparison with other schools in the region due to lack of government support or inability to raise tuition or other funds. So do private schools, which can provide quality education only up to the level that can be afforded or ill-afforded by its students. Just barely able to provide professional training to its students, Philippine technological schools cannot and have not made any significant dent in research, which by any measure, in the field of engineering, is an expensive undertaking. Thus in the landscape of local technological education there is yet no traveler labeled "*research school*." There are schools, however, that are good teaching schools - good enough to be the source of engineers to the world despite the great odds. The immediate challenge before ICT schools is to bring standards up to international levels - to have the graduates certificated to appropriate standards. Another challenge is to make the global connections with industry in order to produce the ICT professionals they need and demand.

Keywords: ICT roadmap, Philippine technological schools, ICT proffessionals

ENGINEERING SCIENCES AND TECHNOLOGY (Videoconference)

CONFRONTING GLOBAL CHALLENGES IN ENGINEERING

Gerardo C. Ablaza Jr.

President and CEO, Globe Telecom, Inc. Globe Telecom Plaza, Mandaluyong City

Within the Globe Telecom, Inc. and our industry, we have seen many challenges that have far reaching implications for our competitiveness. Global treods in science and engineering can be discussed at a very high level.