A Digital Country with Innovative Economy and Information Implementation for 36 Years

Taiwan has progressed from an agricultural nation into an industrial one. The first National Conference of Science and Technology in 1978 discussed the future direction of Taiwan's technological development while emphasizing that agriculture and industry should develop side by side in the country. Later in 1982, the second National Conference of Science and Technology proposed to have information industry developed as a strategic one. In fact, the country has never established such rigid sectors as Ministry of Information. However, substantial accomplishments have been achieved through inter-ministry cooperation with the Institute for Information Industry.

In 1982, Premier Sun Yun-suan commanded to establish an Executive Yuan Information Development Initiative (IDI), which afterwards was headed by Minister without Portfolio Li Kwoh-ting and Zhou Hong-tao. They stipulated concrete measures to actively carry out the "Development Plans for Information Industry Sector" proposed by the Council for Economic Planning and Development. Since then, information industry has been developed and applied for more than 36 years, with IDI taking the leading role during the first 18 years. In 2001, NICI (National Information and Communication Initiative) was set up to help the information industry develop more flexibly so as to meet the needs of the time.

After the establishment of NICI, the Ministry of Finance has commissioned the Institute for Information Industry to assess the automation of banking system. Determined to promote "Nationwide Banking Automation", it had all the banks invest to organize a foundation consultant company that took charge of all inter-bank system planning and implementing.

As to the various text codes devised by different computer companies for their Chinese computers, there is a need of standard exchange code, just as Chinese is needed for communication among tens of different dialects. After incorporating opinions from all sides, NICI resolved that universal Chinese character exchange codes be used by nationwide information industry. It then proceeded to search for an internal code that enabled domestic information industry to communicate with international companies. In this way it has built a seamless connection between computers produced in Taiwan and their international counterparts.

In 2001, after coordinating NII (National Information Infrastructure), IDI (Information Development Initiative), and iAeB (Industrial Automation & Electric Business), the Executive Yuan established NICI (National Information and Communication Initiative). The Premier then assigned Minister without Portfolio as the general convener, along with Secretary-General of the Executive Yuan and the Committee Chairperson of the Research, Development, and Evaluation Commission supporting as co-conveners. It served as a platform to integrate related institutions and to further the overall nationwide information industry implementation.

Through cooperation within different work teams, NICI sets every five years as a work stage. On different stages during recent 20 years, it has unveiled various projects such as e-Taiwan, M-Taiwan, u-Taiwan, Intelligent Taiwan, Cloud Computing Development, Digital Convergence Development, e-Government and so forth. They all aimed to upgrade information industries, construct practical information applications, and boost the quality of life for people in Taiwan.

Taiwan is renowned for its e-Government services. It aimed to reach the goal of 6 million broadband household access rates by the year 2008. To make Taiwan as the most advanced e-Country in Asia, the administrative ideal is to replace streets and roads with online networks. To carry it out, the government has made use of public construction fund to implement nationwide information infrastructures and applications.

U-Taiwan utilizes the ubiquitous computing applications with a view to allowing people to enjoy the quality services the government provides, regardless of their educational, economic or regional backgrounds. With multiple devices, even disadvantaged groups are entitled to such quality e-services. To counteract the global financial crisis in 2008, the Taiwan government pooled together all the public construction resources to bring forth twelve love-Taiwan implantations. It tried to build an Intelligent Taiwan on the bases of e-Taiwan and M-Taiwan and in addition, present Taiwan as the paragon of a quality networking society in the world.

What confronts the next wave of information revolution will be issues such as unmanned autonomous cars, big data, robots, Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), Cinematic Reality (CR), and so on. Human life has become so intimately connected with the forever changing information technology that to hold the leading role, Taiwan government will keep adjusting goals for each stage and moving onwards to the future.

06 數位國家 創新經濟 推動資訊發展 36 年

台灣從農業時代進入工業時代,1978年第一屆全國科技會議,研討未來科技的發展方向,強調農業與工業並重。1982年第二屆全國科技會議時,就提出發展資訊工業為策略性工業,我國從未成立資訊部等剛性部門,反而以跨部會層級搭配資策會幕僚作業,已完成可觀的成果。

行政院長孫運璿指示成立行政院資訊發展推動小組「院資推」,政務委員李國鼎、 周宏濤領軍,研訂具體辦法,積極推動經建會所擬「資訊工業部門發展計畫」, 列管追蹤開始,資訊產業發展與應用超過36年,院資推主導前18年,到2001 年開始「國家資訊通信發展推動小組」,讓資訊發展更有彈性,切合時代需要。

「院資推」成立,就對財政部已委託資訊工業策進會已完成銀行自動化評估,決 定加速推動「全國銀行自動化」,由各銀行共同投資,籌組財團法人顧問公司, 負責跨行有關系統、規劃及設計。

針對各廠牌中文電腦的文字碼不同年代,猶如萬碼奔騰,無法直接連線溝通,需 訂標準交換碼,就像方言間無法溝通,需推行國語一樣。資推小組聽取各方意見 後,在通用漢字、全漢字交換碼,選擇通用漢字交換碼供全國資訊業使用,再以 國內統一標準與國際間洽談電腦內碼接軌,奠定台灣電腦與國際無縫接軌。

院「國家資訊通信發展推動(NICI)小組」,院長指派政務委員擔任總召集人,行 政院秘書長與行政院研考會主委擔任協同總召集人,以該平台協調相關部會,推 動國家整體資通訊建設事宜。 國家資通發展推動小組近20年來,透過不同的工作分組,每5年為一期程,在 不同階段推出「國家資訊通信發展方案」、「e-Taiwan」、「M-Taiwan」、「u-Taiwan」、 「智慧台灣」、「雲端運算發展」、「數位匯流發展」、「電子化政府」、「國家資通訊 安全發展」等,促進資訊通訊相關產業升級,建構資通訊創新應用發展基礎與環 境,帶動國民生活品質提升。

台灣以電子化政府服務著稱,設定 2008 年達到 600 萬戶寬頻到家,打造臺灣成為亞洲最 e 化國家,以「網路取代馬路」的施政理念,首度以公共建設經費推動國家資通訊基礎建設與資通訊技術應用。

u-Taiwan 配合無所不在運算技術發展與應用,希望民眾有感切入,讓任何人都能 不受教育、經濟、區域、身心等因素限制,在任何時間、地點,透過多元裝置享 受經濟、便利、安全及貼心的優質生活服務,即使弱勢民眾也可運用電子化政府 服務。

2008年全球金融危機,政府集中公共建設資源,提出愛台十二建設,希望在數位台灣、行動台灣的基礎,建設智慧台灣,規劃符合民眾生活需求的關鍵性應用, 使臺灣成為世界優質網路化社會應用典範。

面對下一波資通訊科技革命,是無人自駕車、大數據、機器人、VR 虛擬實境、 AR 擴增實境、MR 混合實境、CR 影像實境,人類生活已與資通訊科技密不可分, 資通訊科技持續在變,為了掌握領先優勢,組織名稱一直改變,階段任務目標持 續調整,台灣政府部門希望持續前瞻未來。