出國報告(出國類別：參加國際會議)

出席第 2 屆「臺美數位經濟論壇」(DEF)
報告書

主辦機關：國家發展委員會
團長名銜：龔副主任委員明鑫
會議地點：美國華府
出國期間：105 年 10 月 10 日至 17 日
報告日期：105 年 11 月 10 日

摘　　要

第 2 屆「臺美數位經濟論壇」(U.S-Taiwan Digital Economy Forum, DEF)於 105 年 10 月 13 日在美國華府召開，延續去(104)年首屆會議成果，雙方政府及企業代表持續針對當前主流的數位經濟相關議題進行更廣泛的政策討論與交流，過程圓滿順利，會後並發布聯合新聞聲明，臺美雙方在數位經濟的合作關係更向前邁進一大步。

本次論壇分別由國發會龔副主委與美國國際通訊暨資訊政策協調人 Daniel Sepulveda 大使擔任臺美雙方代表團團長，美方官方代表包括國務院、商務部、美國貿易代表署、聯邦通訊委員會、國家標準與技術局(NIST)、聯邦貿易委員會及美國在臺協會(AIT)代表；我方代表團則包括國發會、行政院科技會報辦公室、經濟部、法務部、金管會及駐美國臺北經濟文化代表處(TECRO)代表參加。另外，也擴大邀請臺美雙方相關業界代表與會，從業界的觀點，提供經驗分享與政策建議。

我方代表團並於 11、12 日論壇召開前，先行拜會美國國務院、商務部、聯準會等單位，針對數位經濟有關議題進行深入的意見交流。

本次論壇議題經過臺美雙方多次磋商，主要針對數位經濟發展的環境與規範、數位貿易與隱私規則、物聯網(IoT)與智慧城市、數位金融(Fintech)等四大議題進行交流，以強化雙邊數位經濟相關產業的合作與發展，促進臺美雙方在數位經濟發展上的共同利益。會後臺美雙方共同發布聯合新聞聲明，重點包含：臺美透過 DEF 推動數位經濟合作、擴大鏈結臺美創新創業發展利基、臺美智慧城市及物聯網技術合作，以及臺美通力合作縮短全球數位落差等。

目　　錄

壹、 本案緣起與目的

首屆臺美 DEF 由美方「美國在臺協會(AIT)」提議辦理，在本(國發)會及 AIT 共同籌劃下，104 年 12 月於臺北(本會)舉辦，係臺美雙方首次針對數位經濟發展建立之高層次政策交流與合作平臺。為持續累積臺美數位經濟合作能量，今(105)年 3 月美國國務院經濟與商業事務局首席副助理卿 Kurt Tong 訪臺拜會本會時表達,希望於明(106)年初召開臺美第 2 屆 DEF。嗣後美方考量為利於今年 11 月總統大選前，就臺美數位合作奠定更為紮實之基礎，爰提前於今年 10 月 13 日在美國華府舉行。

本屆 DEF，美方由國務院國際通訊暨資訊政策協調人 Daniel Sepulveda 大使擔任團長，率國務院、商務部(含：國家標準與技術局，NIST)、美國貿易代表署(USTR)、聯邦通訊委員會、聯邦貿易委員會、AIT 代表及 Google、Apple、Uber、Qualcomm 等民間企業共同參與；我方則由本會龔副主委率國發會、行政院科技會報辦公室、經濟部、法務部、金管會、外交部(駐美國臺北經濟文化代表處)，以及資策會、雲沛創新集團、宏碁雲科技、向威國際聯合投顧等業界代表出席(代表團名單詳附件 1)。

議程安排臺美雙方政府及業界代表針對數位經濟發展的環境與規範、數位貿易與隱私規則、物聯網(IoT)與智慧城市、數位金融(Fintech)等四大議題進行交流，並於會後另進行官方閉門會議；會後雙方共同發布聯合新聞聲明，揭示未來合作方向。我方代表團並於 11、12 日論壇召開前，先行拜會美國國務院、商務部、聯準會等單位，就數位經濟相關議題深入交換意見。(行程安排詳附件 2；DEF 議程詳附件 3、各場次簡報詳附件 4；會後新聞稿及中、英文聯合聲明詳附件 5)

貳、 出席會議暨活動紀要

一、 拜會行程(10 月 11 至 12 日)

(一)會晤美國商務部「國家標準與技術局」(National Institute of Standard and Technology, NIST)

10 月 11 日上午 10 時至 11 時 30 分，龔副主委率國發會、院科技會報辦公室、經濟部工業局及資策會代表，在 TECRO 人員陪同下拜會 NIST，共進行 3 場會談：

1. 第 1 場由主管實驗室計畫副所長(相當於副次長層級)Dr. Kent Rochford 代表接見。R 副所長說明 NIST 組織架構，並就我方提問之如何與其他標準組織合作、是否有協助中小企業進行研發創新之機制等議題，與我方代表進行廣泛交流。談話重點如次：

   (1) NIST 係美商務部六大機構之一，與國際貿易總署(ITA)及專利商標局(USPTO)平行，局長為商務部次長；NIST 執掌國家度量衡系統(metric system)之制定，設有物理度量衡、生化材料度量衡、工程系統、資訊軟體技術、通訊技術等實驗室，以及奈米尺度量測技術、中子量測技術等研發中心，工作重點在於建立各項科技領域的架構(Framework)，亦即辨明特定領域的明確知識與產業生態系範疇[1]。

   (2) NIST 從事的「標準制訂」工作係制定度量衡基礎測量標準(measurement standard)，並非制訂一般由 ISO/IEC/IEEE 等組織所共識產生的文件標準(documentary standard)，亦即特殊規格的制訂。由於 NIST 不介入各民間組織訂立各種文件標準，因此 NIST 對於民間標準組織而言，比較像是上位基礎度量衡資訊的供給者，而非制訂標準的競爭者。

   (3) NIST 在雲端、大數據等領域與 ISO/IEC 等組織有互動，惟互動內容並非共同制訂產業標準(industry standard)，而是確認度量衡制度與產業標準能夠互通。此外，NIST 也提供技術諮詢，但限於提供技術供業界參考，並不特別提倡某項技術，且須確保技術資訊不能僅供特定組織用以取得產業競爭優勢。

2. 第 2 場與主管資訊技術實驗室副所長 Dr. James St. Pierre 及資深資訊技術政策顧問 Adam Sedgewick 會晤，P 副所長說明其實驗室近

[1] 資策會補充：舉例而言，在 5G 通訊領域上，NIST 負責釐清哪些技術是跟 5G 有關，並繪製出 5G 完整生態圈供聯邦政府與業界瞭解關係人互相的關係。NIST 並不直接進行通訊標準的制訂。

期著重建立資訊隱私(privacy)與安全性(cybersecurity)架構，並回應我方提問之如何控制資料(DATA)品質、如何讓傳統產業跨過數位化的難關(例如協助傳統製造業與 IT 產業結合成為智慧製造)、NIST 如何因應不斷變遷的科技等問題。另，S 政策顧問關注臺灣資安法的立法進度，我方回應目前已將草案送至立法院審議。談話重點如次：

(1) NIST 工作內容在於建立架構(Framework)以定義範疇，而非如業界產業組織等，直接對資料品質做出定義。NIST 從許多案例(Use cases)得到資訊來建立架構，包含商業應用案例(business applications)、政府在處理各項議題時的經驗等皆會被納入研究，以確保該架構能容納商業/政府等多面向議題。

(2) NIST 不直接執行產業推動工作，其協助產業數位化的做法仍然是採取間接方式，亦即定義好各議題的架構，讓產業間更易於溝通。舉網路安全(cybersecurity)架構為例，美國相關單位於制定網路資料安全標準時，應遵循完全性(integrity，即利用數位簽章等方式確認資訊來源)、保密性(confidentiality)與可取得性(availability)三項原則；該架構確保產業在談論各種技術議題時，對於網路安全範疇有一致的瞭解，可加快形成共識。

(3) NIST 研究部門極少重組，面對不斷出現的科技新議題，皆以跨部門組成之跨領域小組協作方式因應。例如，網宇實體系統(CPS)研究，係由 CPS、資訊技術、工程測量等 3 個部門的主管共同指揮，以確保跨部門合作。

3. 第 3 場與主管網宇實體系統(CPS)實驗室助理所長 Dr. Sokwoo Rhee 會面，R 助理所長說明其實驗室與物聯網及智慧城市之關聯，並就我方提問之「白宮智慧城市計畫」的成立背景、NIST 推動全球城市團隊挑戰(Global City Team Challenge, GCTC)與國際智慧城市組織 ICF 進行智慧城市評比的差別等議題，與我方代表進行交流[2]。談話重點如次：

[2] R 助理所長及我方經濟部工業局代表呂正華副局長，均為本屆 DEF 會議物聯網與智慧城市場次簡報者。

(1)R 助理所長說明，CPS 實驗室原僅研究智慧電網(smart grid)，4 年前加入對 CPS 的研究。由於物聯網目的係介接實體世界與數位世界，需要大量應用到 CPS 的知識來實現，而政府端最重要的物聯網應用就是智慧城市，因此，CPS 研究主要是聚焦於釐清物聯網與智慧城市的範疇與架構。

(2)白宮科技辦公室(white house office of science and technology policy, OSTP)決定是否建立特定計畫(initiative)，如計畫確實啟動，OSTP 將整合管考聯邦各部會現有計畫，並規劃未來的新計畫。因此，OSTP 成立白宮智慧城市計畫(The white house smart city initiative)後，將運輸部等部會與智慧城市相關計畫一併納入管考，並協調 NIST 建立國家級智慧城市的架構學問。

(3)NIST 推動之 GCTC 計畫，係提供全球智慧城市團隊技術交流之平台，目標為找出有部署經驗、且可被複製的城市問題解決方案，並將能採用同一解決方案的城市形成「超級集合」(super cluster)，以降低佈建成本。NIST 於推動智慧城市扮演的角色係提供資訊藍圖(blueprint)，讓各方關係人在穩定架構下討論合作，並自行決定其議定內容(protocol)。

(二)會晤美國國務院(Department of State, DOS)

10 月 12 日下午 1 時至 1 時 40 分，龔副主委率全團於美國在台協會華府總部(AIT/W)會晤美國國務院經濟暨商業事務代理助卿 Thomas S. Engle (助卿 Charles Rivkin 公出外埠)。談話要點如次：

1. E 代理助卿歡迎我團來美共同召開 DEF 會議，繼稱昨(11)日國務院主管會報時國務卿凱瑞(John Kerry)強調數位經濟議題之重要性，蓋此攸關美國繁榮，要求國務院所有官員均應身為「數位經濟官員」積極推動，顯示凱卿之重視程度。龔副主委復以，感謝國務院安排第 2 屆 DEF 會議，盼雙方延續去年首屆會議成果，就當前主流的數位經濟議題進行更廣泛的政策討論與交流。

2. E 代理助卿有意瞭解我方推動五大創新產業政策內涵，並探詢相

關計畫有無美方業者可參與的空間。龔副主委說明：

(1)「亞洲‧矽谷」、「智慧機械」、「綠能科技」、「生技醫藥」、「國防產業」等五大創新產業，係基於「建構下一世代產業發展」、「在地產業連結」、及「與先進國家在技術上進行系統性合作」等三大原則推展。

(2)透過如「亞洲‧矽谷推動方案」發展臺美產業生態體系，將可促成臺美產業進一步之合作交流，目前已有微軟、思科及惠普等美商洽談合作；「生技醫藥」方面，臺灣已與波士頓建立良好合作基礎；「綠能科技」方面，臺灣專注發展太陽能面板及離岸風力發電，德國及日本均展現積極合作意願，我盼亦與美合作；至於「國防產業」，臺灣尤需美國支持。我至盼美國參與我五大創新產業，深化臺美經貿交流。E 代理助卿欣聞已有多家美商參與合作，盼雙方持續推動。

3. 最後，E代理助卿提及甫於10上旬在華府舉行之臺美TIFA會議，重申美方除推動高科技業者盼與我加強交流外，農業及畜牧業者亦亟盼擴大進入我市場，盼我方儘速採取行動落實 2009 年牛肉議定書，並盼我近期成立之「食品安全風險評估管理委員會」在進行風險評估時能以科學為基礎(science-based)。龔副主委回應，我方瞭解美方之關切，我政府刻正推動新農業政策，將以開放及爭取國際市場為目標，亦已規劃成立以科學證據為基礎之食品安全實驗室，惟農民進行產業轉型及政府之對內溝通需時較久，盼美方能理解我方立場；另，龔副主委亦敦請美方協助促成臺美簽署雙邊投資協定(BIA)。

(三)會晤美國財政部「消費者金融保護局」(Consumer Financial Protection Bureau, CFPB)：

10 月 11 日下午 4 至 5 時，金管會紐約辦事處蘇慧芬主任、向威國際聯合投顧張世榮董事長，在 TECRO 經濟組葉士嘉秘書陪同下，拜會 CFPB，由該局資深顧問暨 Project Catalyst 主管 Dan Quan、政

府間事務部門副主管 John Pitts 代表接見。談話重點如次：

1. CFPB 係主管保護銀行消費者之權益，最近該機構甫處分富國銀行(Wells Fargo)未經客戶同意，盜開存款和信用卡帳戶，而處以鉅額罰款和賠償金。而為鼓勵對消費者友善之金融商品與服務之創新環境，該機構於 2016 年 2 月發布豁免令最終政策(Policy on No-Action Letters, NAL)，希望能夠促進友善之金融環境，讓業者開發有保障與創新之商品與服務，來滿足民眾之需求。

2. 蘇主任請教自豁免令最終政策公布後，目前申請人向 CFPB 申請核發豁免令之情形與 CFPB 之案件審核情形。又，豁免令最終政策公布後，CFPB 與其他美國金融監理機關間對於金融創新之溝通情形，以及美國金融監理機關針對核發豁免令之申請人之監理情形。美方復以：

   (1) CFPB 目前定期在舊金山矽谷、紐約等地舉辦座談會，時間地點會事先在網站揭露，由有興趣的業者登記報名，投資人如有興趣亦可報名參加；該座談會閉門會議，由 CFPB 官員及相關專家參加與業者進行面談。

   (2) 目前 CFPB 正在審核一些申請豁免令案件，惟未來即使 CFPB 同意核發豁免命，並不代表 CFPB 保證該業者之商品服務，不具拒束力，相關風險仍由投資人自負，業者並應有足夠的證明顯示其產品服務確具二大要件，一為該產品或服務能為消費者提供有別於市場上現有產品或服務之重要利益，另一要件為對消費者可能造成有別於市場上現有產品或服務之潛在風險，及現行法規適用之不確定性。

   (3) 豁免令觀念與監理沙盒(sand box)理念類似，惟豁免令不是去監理化(deregulation)，也非法令鬆綁，而係鑒於現行法令修改過程曠日廢時，致與目前金融環境及民眾消費習慣有相當差距，為因應經濟環境改變，金融主管機關可對法令規定有解釋適用的空間，使業者順利發展商機，促進消費者利益。

3. 蘇主任感謝 CFPB 代表之經驗分享，並表達我國金管會願與

CFPB 就金融消費者權益之保障持續加強合作，CFPB 代表欣然同意，表示金融科技是未來重要趨勢，CFPB 將與我國加強合作。

(四)會晤美國「聯準會」(Board of Governors of the Federal Reserve System, FRB)：

10 月 12 日上午 10 至 11 時，金管會紐約辦事處蘇慧芬主任、向威國際聯合投顧張世榮董事長，在 TECRO 經濟組葉士嘉秘書陪同下，拜會 FRB，由風險暨監管經理 David Reiser、銀行監管處經理 Kwayne L. Jennings 等代表接見。談話重點如次：

1. 蘇主任請教 FRB 官員，面臨新型態之金融科技業可能產生之風險，FRB 是否將研議相關之監管措施或規範；又針對金融科技業者之監理，FRB 與美國其他金融監理機關之合作與討論情形。美方復以：

   (1) 金融科技例如網路金融，民眾透過網路進行金融借貸，而免去向銀行借款，改變銀行的經營型態，大型銀行多以與金融科技業者投資、併購等合作方式，擴展傳統銀行對新金融科技所延伸的金融市場，而小型銀行受金融科技衝擊較大。

   (2) 面對金融科技快速發展，FRB 投入相當多人力及資源因應挑戰，包含召募相關科技人才、加強員工教育訓練、持續與相關政府機關交流金融科技知識，以及強化金融監理方式等。對此，蘇主任提及 FRB 於今(2016)年 6 月與 IMF 合辦第 16 展金融業政策挑戰國際研討會，預計 12 月在華府舉行金融創新之學術與政策研討會，希望 FRB 後續相關研討會能邀請我國金管會參加，美方回應將會轉達上開訊息予我方參考。

   (3) FRB 對於金融業致力發展的分佈式分類帳技術，已進行相當多的研究與討論，FRB 先進行研究以瞭解此新科技，再深入研究此科技對金融業的影響，研擬建議發展政策，並成立監管小組就業者的營運與法規遵行等議題，與相關金融監理機關包括 CFPB、財政部通貨監理署(OCC)等機關共同研商此一

新科技所伴隨的監管技術的挑戰。

(4) 為因應如何確保網路安全、IT 環境的重新建構等國際間重視的課題，美國相關金融監管單位如美國證管會(SEC)、商品期貨交易委員會(CFTC)、財政部通貨監理署(OCC)等，皆致力加強金融科技人才的培育與訓練。

2. 蘇主任分享我國金管會近年來推動金融科技的重要措施，希望金融產業能提供更便捷的服務，持續與 FRB 就金融科技有關監理議題進行經驗交流與資訊分享。

(五)拜會華府智庫「全球臺灣研究中心」(GTI)：

10 月 12 日下午 2 時 30 分至 3 時 45 分，龔副主委率全團拜會華府智庫「全球臺灣研究中心」(GTI)，由該中心董事長賴義雄等代表接見。甫於 9 月中旬由旅美臺僑成立之 GTI，旨在強化臺美關係，促進臺美於經濟、政治及國安層面之合作，目前 3 大工作重點為：(1)每週三發行電子報提供對臺政策及美國與兩岸三角關係的專家分析；(2)每 2 周定期辦理公開座談；(3)辦理大型年度研討會議。龔副主委就 GTI 提問之五大創新產業與「亞洲．矽谷推動方案」內容、國發會功能職掌等議題予以回應，雙方並期盼未來 GTI 可透過下列管道與我國政府力量整合，包含：建立旅美僑民人才資料庫、舉辦聯合研討會議，以及提供博士後研究人員一年期以上赴美研究機會等。

二、 DEF 會議第 1 天(10 月 13 日)

(一)美方代表致詞摘要

1. 美國國務院副助卿 Daniel A. Sepulveda 大使開幕致詞

(1) 臺美均為數位經濟的領導者，且具備堅強的夥伴關係，雙方都相信透過觀念及政策的持續推動，可幫助窮人脫貧，並促使全球的非正式經濟(informal economy)正規化，同時增加多邊供應鏈的效率，以及提升勞動者生產力。

(2) 麥肯錫研究機構指出，科技快速變革為推動當前社會變革的主因之一，與工業革命時期相比較，速度為 10 倍，規模為 300 倍，衝擊效果為 3000 倍。我們應確保政策的提供，能促進數位經濟蓬勃發展，並應確保落實資訊跨境流通及隱私權保護。

(3) 臺美必須相互學習，在發展數位經濟方面對世界做出貢獻，盼雙方加強合作，就政策環境進行協調合作，以創造有利數位經濟蓬勃發展之環境，並尋找發展契機。未來兩天，相信透過臺美雙方資訊交換、觀念討論及合作領域的確認，會議成果一定豐碩。

2. AIT-W 常務董事(managing director) John Norris 開幕致詞

(1) 2015 年臺美雙邊經貿表現亮眼，雙邊貿易達 660 億美元，臺灣為美國第 9 大貿易夥伴，超越義大利及巴西。

(2) 第 2 屆臺美數位經濟論壇將在去年已建立的基礎上，續推降低數位經濟發展障礙的政策與實務協調，期望透過法規監管自由化，促進經濟成長。資料顯示，金融科技資訊流、高科技供應鏈、物聯網及智慧城市等數位經濟之發展已帶動當前經濟之成長，預期未來其推升經濟成長之力量更不容忽視。

(3) 本屆論壇將進行支持數位發展之非過度監管的政策與法規環境，高標準的數位貿易與隱私規則，創新及運用物聯網與智慧城市相關新科技，金融科技增加金融商品與服務及改善效率等共同優先議題之討論。預祝會議成功。

3. 美國貿易代表署(USTR)副代表 Robert Holleyman 專題演講(keynote)

(1) 臺美貿易及投資架構協定(TIFA)甫於上週結束，會中討論到臺灣政府對提升智財權保護及監管透明度的努力，包含促進金融機構跨境數據傳輸更順利等，相關成果值得肯定，盼臺

灣政府監管單位持續致力促進跨境資料流通。

(2) 21 世紀數位經濟與貿易蓬勃發展，已改變傳統商品交易型態，且數位經濟涉及跨國活動，影響國際經濟至鉅，惟當前的貿易法規已不足以因應未來數位經濟發展之需，尚有許多法規障礙及貿易壁壘需要排除，例如以資料在地化(data localization)限制數位資訊之跨境流通等。

(3) 美國盼建立有利創新經濟發展之雙邊及多邊貿易規則，「跨太平洋夥伴協定」(TPP)已納入推動開放網路與跨境商務之數位經濟 24 條規範(Digital 2 Dozen)，並獲世界貿易組織(WTO)及 G20 等國際經貿論壇注及，目前服務貿易協定(TiSA)談判亦擬獲致相同成果。

(4) 數位貿易可推升創新與國際經貿，USTR 非常重視，爰與各相關部會密切合作，並於今(2016)年 7 月成立由大使督導之數位貿易工作小組(digital trade working group)，觀察各國影響數位經濟發展之法規障礙及貿易壁壘，並透過專家評估如何進行法規與機制之調整或與各國合作。

(5) 美國將持續努力確保公平競爭環境，以推動數位經濟發展與創新。感謝臺灣目前為建立開放環境之努力，於上次 TIFA 開會時，臺灣當局承諾要制定部分規則，將落實於 TiSA，包括科技中立，不強求使用臺灣當地數據中心等，這些規則有賴政府當局架構正確的框架，以促進合作開發技術、推廣創新；至盼臺美雙方持續合作促進數位經濟，俾為更強有力之貿易夥伴。

(二)我方代表致詞摘要

1. 國發會龔明鑫副主委：

各位好，我與我的團員都很高興能參與本次在華府舉辦的第 2 屆「臺美數位經濟論壇」，就數位經濟相關政策與議題及未來可能的合作面向進行討論。ICT 與網際網路的發展，已對全球之經濟

與貿易造成巨大改變，數位經濟亦為未來之主要政策方向，依據麥肯錫全球研究院 2009 年的研究，數位經濟對於推動 GDP 發展具有重要影響，帶來數位紅利，亦改寫了新的貿易規則。目前臺灣正在推動數位國家創新經濟發展方案，推動期程為 2017 至 2025 年，期望台灣成為一個創新永續的國家。此外，亦提出「亞洲・矽谷計畫」予以落實，主要著重於發展物聯網產業，今天期望來學習新興課題，協助 IoT 產業發展、促進臺美雙方交流，與相關數位能力之建構。去年在台北舉辦首次的臺美數位經濟論壇，今天期望吸收雙方經驗，並建構機制持續分享數位經濟與科技發展，也期望今天論壇圓滿成功。

2. TECRO 李光章公使：

高大使今天因公無法到場，爰委由本人出席。網路空間不分國界，使得數位經濟成為重要領域，期望能達到全球競爭，過去臺灣也證明了自己扮演重要角色。臺灣是重要 ICT 商品出口國，許多平板電腦及手機等皆為臺灣製造，各位若使用 iphone 7，其指紋辨識系統也是臺灣的台積電製造，臺灣為亞洲發展銀行評選出來之數位經濟發展國家，蔡英文總統最近提到期望將臺灣成打造為亞洲矽谷，並將關注重點放在大數據、網路安全等。在政府層級上已制定數位經濟論壇之機制，透過雙邊對話建構相關機制，今天論壇為很好的平台，有助於促進臺美發展相關經濟關係。

(三)各場次議題報告重點

1. 第一場次「數位經濟發展的環境與規範」

美方政府及民間代表	
講者	聯邦通訊委員會(FCC)國際局策略分析及談判分析處副處長 David Hu
報告	1. FCC 為美國數位通訊之政策制定者與規範者產業的監管者，面對

重點	媒體、廣播電視與電信服務產業的融合趨勢，FCC 在監理規管上面臨不小的挑戰。 2. 鑒於科技與商業模式的發展遠比法規調適的速度為快，為避免傳統管制策略可能成為產業創新的障礙，美國政府決定採取低度管制策略(Light Touch Approach)[3]，亦即讓市場與產業先行，政府在旁觀察；只要不涉及欺騙消費者、不違背公平競爭原則，政府不會介入。FCC 低度管制策略內涵： (1) 四大核心元素：管制彈性(Regulatory Flexibility)、技術中立(Technological Neutrality)、消費者選擇(Consumer Choice)，以及透明化(Transparency)。 (2) Light Touch 並不等於 No-Touch，對企業因欠缺誘因而不願意投資、不存在市場競爭的領域，例如普及服務、提供身心障礙者近用服務(Accessibility)、緊急通訊等，政府有義務介入，提供誘因促進相關服務的發展與佈建。 (3) FCC 期望藉由低度管制策略，實現「增加寬頻需求、激發更多創新、改善網路環境」的良性循環。 3. 現行實施低度管制策略的領域包含： (1) 無線產業(Wireless Industry)。 (2) 開放網路指令(Open Internet Order)：開放網路命令，確保消費者可不受應用程式、服務的限制去接取合法的內容。 (3) 實施先進頻譜管理策略(Spectrum Frontiers)：開放新頻段，並設計多樣的釋出機制，且不限定使用何種傳輸技術，讓市場自行發展標準。FCC 強調，現階段不會定義什麼是 5G，讓市場與產業決定其標準。
講者	資訊產業協議會(ITIC)資深副主席 Josh Kallmer

[3]資策會補充：FCC 亦是近期才開始推動 Light Touch Regulation，且目標集中在商業資料服務(Business Data Service, BDS)產業上。該策略是放棄以前同一業種新舊業者適用同一管制標準的思維，改而創造對新進者較友善的環境以激勵創新。但目前美國國內對此做法爭議仍多。

報告重點	1. 因跨國服務已成為網路經濟的常態，因此許多國家均會面臨法規無法管理新商業模式的衝擊。為了讓破壞性創新能夠自由發揮，因此需要一個較為彈性、低度管理而非管制的法規環境。 2. Light Touch 並不等於 No-Touch，諸如保護個人隱私、網路整體的安全性、維持消費者選擇性等工作，仍是必要的政策。 3. 為了確保商業模式能自由流動，如同 TiSA 等跨國數位貿易協定便成為關鍵。 4. 促進資料跨境流通，避免資料強制落地是為關鍵。
我方政府及民間代表	
講者	行政院科技會報辦公室主任 柴惠珍
報告重點	1. 臺灣已具備國際級資通訊基礎建設，並維持 WEF/NRI 評比全球前 20 名。隨著國內網路與電商經驗逐漸成熟，已具數位經濟發展能力，而我國的硬體設計能力，有助於建構軟硬整合、虛實融合之國際競爭優勢。 2. 政府積極推動創新驅動政策，正在研議新的「數位國家創新經濟發展方案」，從「數位匯流創新應用」、「數位經濟躍升」、「網路社會開放政府」、「智慧城鄉區域創新」、「友善法制環境」、「跨域數位人才」與「先進數位科技」等不同面向，規劃跨部會的推動策略。 3. 考量新的經濟型態(遠距健康照護、跨境電子商務、無人科技與分享經濟)需要新的視野打造法規友善環境，政府研議仿照新加坡策略，引進監理沙盒機制，即如同本次討論的 light touch 策略。 4. 針對數位經濟，研議討論中的法規議題包括：網路安全管理法、Fintech 監理沙盒，勞動法規鬆綁、公司法調整等。
講者	資策會產業情報研究所(MIC)資深分析師 鄭兆倫

報告重點	1. 臺灣對數位經濟關聯產業的範疇定義，包含數位產業(如電子電機製造業與數位服務業)與非數位產業(non-digital sector)中，運用數位技術者(如智慧農業與智慧製造)。 2. 電腦、電子產品及光學製品製造業： • 臺灣長年為美國資訊業之伙伴，並欲於物聯網時代尋求更深的互動。 • 正積極與生態圈共同進行早期的研發創新。 • 新的對應政策之主要目的在提供測試場域。 • 生產實體商品，減少關稅壁壘仍然是關鍵。 3. 資訊服務業： • 雖然規模較小，但此為臺灣正積極創新的領域。 • 除網路安全產業外，諸如智慧工廠與服務型機器人均為產業重點致力領域。 • 為資料導向產業，因此藉由明確解釋個資法、確保隱私等作為來促進資料流通非常重要。 • 此領域有許多新商業模式，因此期藉由 Light touch regulation，讓新商業模式有一試之機會非常重要。 • 對於創新所產生的衝擊，需要對應調適。 4. 電子商務產業： • 由於部分服務需要實體活動(如物流)，因此電子商務相對資訊服務較為在地化，產生了許多利基型的電子商務業者。 • 臺灣與東南亞環境相近，互相交換電商產業狀況近年正在加速。 • 跨境電商課稅，是目前臺灣正在處理的政策議題。 • 為刺激創新，法規沙盒(Sand Box)政策亦正在成形中。 5. 綜上，「支持創新」以及「衝擊調適」將是未來臺灣政策上應持續致力的議題。

2. 第二場次「21 世紀數位貿易與隱私規則」之「數位貿易」

美方政府及民間代表	
講者	美國貿易代表署(USTR)資通訊組組長 Sam DuPont
報告重點	1. D 處長提及數位貿易牽涉到各行各業，不只是高科技產業。數位貿易能成功最重要的一點，就是必須允許資料可自由跨境移動，以金融服務業、物流服務業來說特別明顯。過去工程、建築服務業多半無法跨境提供服務，現在透過網際網路亦有進行國際貿易的可能。 2. 為了促進數位貿易的開放，應制訂規則以確保資料可以自由流動，除傳統的服務貿易規則可應用至數位貿易，渠認為數位貿易必須有三大基礎規範： (1)不應有數據在地化的要求：資料的儲存不應以政治疆界來劃分，而應以儲存於何地最有效率為考量，資料放在很多個不同地方處理並不符合處理上的規模經濟考量，且對促進個人隱私保護不見得有幫助，因為儲存地點越多被入侵的機會也增加。 (2)數位產品的非歧視性待遇：數位產品僅以編碼方式存在，而非實體存在，制訂貿易規則時，政府針對電子產品不應課徵關稅，而且對電子產品課徵關稅實際上亦不易做到，此外，電子產品與傳統產品具有類似性，兩者應有一致的貿易規則。 (3)市場進入不應以取得原始碼為要求：當地政府不應以監管國民安全的理由來要求企業須提供原始碼。 (4)上述規則可強化自由貿易的目標，並在美國的數位 24 點(Digital 2 Dozen)中闡明。 3. 我國與美方均參與服務貿易協定(TiSA)談判，渠瞭解 TiSA 成員企圖在今年完成談判並樂見其成，且期待進一步與我國就上述議題合作。

講者	Google 公共政策經理 Nicolas Blamble
報告重點	1. Google 公共政策經理表示臺灣的網路連結性比美方好，雙方應建立更有包容性的環境促進數位貿易發展。 2. 國家的網路政策會影響到產業與網路使用者，倘對網路有所管制，將限制跨境資料流通，就如同制訂傳統關稅會限制貨品流通性，因此應於共同框架建立共識。 3. APEC 所推動的「跨境隱私保護規則體系」（Cross Border Privacy Rules System，CBPRs）可以將規則與隱私保護連結，確保海外競爭者亦可加入市場。 4. 政府應確保開放的線上平台，透過業者與消費者之間的資料流通，自行建立市場規則。
我方政府及民間代表	
講者	經濟部國際貿易局多邊貿易組專門委員 宋明豪
報告重點	1. 宋專門委員提及電子商務涵蓋貨品及服務業，且所有交易透過螢幕按鈕即可完成，然老年人對於使用數位產品卻是有障礙的。 2. 數位貿易與電子商務降低實體店面的要求，對於資金有限的中小企業參與國際貿易特別有利，尤其我國中小企業比例高達 98%，然其出口值比例僅 15%，仍有許多拓展空間。 3. 數位貿易與電子商務所涉議題廣泛，例如金流支付的消費者保護、當地化要求、隱私保護、稅賦公平性、網路威脅等議題，惟有加速法規體制調整才有助於數位貿易與電子商務的發展。 4. 我國已成立跨部會工作小組處理數位貿易與電子商務相關議題，且準備參考美國 USITC 的數位貿易障礙框架調查瞭解我國業者所面臨的問題。臺美政府間未來則可在 APEC 領域就美方所推動的「數位貿易的下一步」計畫中的重要要件尋求合作機會；

	雙方也可思考建立雙邊對話機制。 **美方主席 S 大使特別評論：**宋專委報告生動有趣，對於數位貿易時代如何透過溝通，讓老一輩或對新技術恐懼的使用者消除不必要的疑慮，是政府施政的重點。此外對於新型態的服務，如優步叫車系統的出現，使得人們可以在閒暇從事副業，創造的新的商機也增加消費者的選擇機會，這就是數位經濟的美好之處。
講者	雲沛集團(funP)行銷長 洪志鵬
報告重點	1. 雲沛集團洪行銷長主張資料就是王(Data is the King)，認為數位時代擁有資料取得管道及處理資料能力的業者，將擁有最後控制權，且透過這些資料即可刊登廣告，例如 Google 的 90%收入即來自廣告收益，大大驅動電子商務發展，透過大量的資料亦可向客戶進行廣告行銷。 2. 利用大數據與人工智慧(AI)分析廣告。 3. 臺灣對研發在行，具有很大優勢，我國電子商務業務量大且具競爭力，對於進軍東南亞市場，我國具有人才、行銷、文化等優勢。 **美方主席 S 大使表示：**在數位時代中，不需要有很多土地蓋工廠或是有很多勞工，僅需要有很多人才，而資料處理業者有管道取得資料，是否就這樣認定業者"擁有"資料，此項議題仍有爭論。

3. **第二場次「21 世紀數位貿易與隱私規則」之「跨境資料移轉與隱私」**

美方政府及民間代表	
講者	商務部國貿局數位服務產業辦公室主任 Krysten Jenci
報告	1. 數據流動和數位經濟：根據麥肯錫(McKinsey)全球研究院 2016 年的報告，數據流動提升全球 GDP 達 10%(約 2.8 兆美元)，甚至

重點	在某些國家 GDP 會因此成長超過 50%，且透由數位平台將增強中小企業實力，產生槓桿效應，變成微型跨國企業(micro-multinationals)。 2. 美國增強數據流之方式：建立消費者信任感，對於數位經濟的成長至關重要。故 2012 年歐巴馬政府之隱私藍圖有三： (1)提出消費者隱私權法案； (2)促進具可實踐性之跨國企業主處理事業良好行為規範； (3)發展全球具可操作性機制：例如：歐盟美國的隱私盾協議(EU-US Privacy Shield)和亞太經合組織(APEC)的跨境隱私保護規則體系(Cross Border Privacy Rule System, CBPRs)。 3. 跨境隱私規則制度：此為 APEC 之隱私保護框架，經由 APEC 跨境隱私次級小組(DPS)研議超過 6 年以上發展而產生之機制。在 2011 年檀香山宣言，經 APEC 領袖會議所採用認可導者提出的 CBPRs。這是基於業者遵循 APEC 隱私框架所發展出一套自願加入之驗證機制，包含跨境傳輸個人資料之行為，由各會員國先申請加入此 CBPRs(目前加入者有美國、加拿大、日本、墨西哥)，該會員國企業向該制度核可之問責機構(Accountability Agents, AA，目前有美國 Truste 及日本 Jipdec)申請驗證通過，即可取得標章。 4. 加入 CBPRs 對台灣經濟的利益：CBPRs 對台灣經濟的好處，是創造隱私保護的可信賴性，促進貿易和提高國內市場的競爭力，同時提供消費者跨境交易時之救濟與跨國執法合作機制，並增加進出口商品或服務之數位經濟。通過建立 CBPRs，能簡化法律糾紛，也能符合歐盟要求之公司應有隱私保護政策之水準，以便利促進跨境交易，特別是增強消費者與營業者之間信任和信心，通過在 APEC 地區建立一套共同的隱私驗證標準，更能為中小企業提供符合規範和監管之措施。
講者	資訊技術產業委員會(ITIC)資安及隱私政策副主席 John Mille

報告重點	1. 就企業角度而言，數位經濟推動上可能遭致的困難在於如何符合國際間關於隱私保護方面的要求。John Miller 以美歐之間甫簽署的「隱私盾協議」為例，由於歐盟法制對於隱私保護有著嚴格規範，美歐透過達成隱私盾協議方式，除因符合歐盟規範企業可得以進行跨境資料傳輸外，同時也有助於兩地用戶放心將資料交予企業使用，故其認為美國在隱私盾協議的推動經驗是成功的，也有其值得參考的地方。 2. 正面肯定 APEC 的 CBPRs 制度對於各經濟體可望帶來的效益。指出在 APEC 區域範圍內，目前仍有經濟體未有明確的隱私保護規範，而 CBPRs 制度正好可彌補此一缺口，並成為各經濟體在隱私保護上的共通性、最低程度之要求。同時，其呼應美方主席 S 大使的觀點，認為經濟體不應排斥使用 CBPRs 制度。 3. 提出企業參與 APEC 的 CBPRs 制度可能帶來之效益，其一，企業在遵循 CBPRs 要求下，經由「問責機構」的確認，可望獲取 APEC 區域範圍內民眾對於該企業的信賴感，提升企業形象。另一方面，企業參與 CBPRs 制度，亦有助於擴大企業營業範疇，進而增加企業的營收。最後，John Miller 回應美國商務部代表 K 主任所提，加入 CBPRs 對於國內有著正面的效益，因此其個人十分樂見並希望臺灣可以加入 CBPRs。
我方政府及民間代表	
講者	法務部綜合規劃司副司長 黃謀信
報告重點	1. 我國個資法為普通法，規範公務機關及非公務機關，法務部擔任個資法之解釋及修正機關，而監督管理與裁罰各目的事業之非公務機關，是中央目的事業主管機關及各縣市政府。 2. 專屬於中央目的事業主管機關監督管理其目的事業之非公務機關權限，大約有兩種：第一,發布跨境傳輸禁制命令；第二，發布個人資料檔案安全管理基準等辦法。

	3. 第一種權限：非公務機關為國際傳輸個人資料，而有下列情形之一者，中央目的事業主管機關得限之： (1)涉及國家重大利益。 (2)國際條約或協定有特別規定。 (3)接受國對於個人資料之保護未有完善之法規，致有損當事人權益之虞。 (4)以迂迴方法向第三國(地區)傳輸個人資料規避本法。 故非公務機關進行合法蒐集、處理及利用時而進行個人資料國際傳輸，中央目的事業主管機關若未發布上開禁令，即可進行。目前僅有國家通訊傳播委員會於 2012 年發布禁止傳播事業傳輸客戶個人資料至中國大陸之案例。 4. 第二種權限：以經濟部為例，為規管網際網路電子商務，依個資法規定訂定發布「網際網路零售業及網際網路零售服務平台業個人資料檔案安全維護計畫及業務終止後個人資料處理作業辦法」，以利遵循。 5. 為協助企業符合臺灣個人資料保護相關法令規範，及主要國際組織對個人資料保護之要求，並建立民眾對於其個人資料被蒐集、處理、利用時之安全感，中華民國經濟部於 2010 年 10 月起即推動建置「臺灣個人資料保護與管理制度」及該制度之證明標章「資料隱私保護標章」(dp.mark)。
講者	資策會科技法律研究所科技應用法制中心應用研究組組長 郭戎晉
報告重點	1. 資料跨境傳輸面對了四項重要挑戰，包括： (1)資通訊技術及商務模式快速變遷，如近期熱門的共享經濟，使得資料跨境流通成為常態。 (2)資料跨境流通，必須兼顧資料的保護與資料之合理運用，但實務運作上存在失衡情形。

(3) 國際個人資料保護立法存在差異，以 APEC 經濟體為例，有同時規範公、私部門者，如日本、韓國與我國；有僅規範公部門者：如美國，亦有尚無個人資料保護專門立法者：如中國大陸、越南、秘魯等。

(4) 國際對於資料跨境傳輸的立場亦有不同，國內採原則開放的做法，但部分國家如歐盟成員國，則是嚴格管制。

2. 在跨境隱私問題因應上，亦須留意「個人資料保護管理制度」(Personal Information Management System, PIMS)與信賴標章(Trust Mark)概念，如已被 APEC 認可的日本 JIPDEC P-Mark 制度，以及美國 TRUSTe 所提供的認證服務等。而 PIMS 的初衷，多在於符合國內隱私保護法律遵循，但目前亦必須將跨境隱私要求，包括歐盟「企業自我約束規則」(Binding Corporate Rules, BCRs)及此次討論的 CBPRs，一併納入。

3. APEC CBPRs 加入的首要步驟，在於提名至少一個隱私執法機關列入 APEC「跨境隱私保護分組」(Data Protection Sub-group, DPS)的「跨境隱私保護機構」(Cross-border Privacy Enforcement Authority, CPEA)清單，之後甫能提名「問責機構」或使用已被 APEC 認可的 AA，再由 AA 負責確認從事跨境資料傳輸的企業，是否符合 CBPRs 的各項要求。由於現階段國內個資法的設計，是所有中央主管機關都是個資法執法機關，在沒有所謂的專責機構之下，若國內考量加入 CBPRs，勢將產生機關協商的必要，而其他經濟體的成功加入經驗，如美國及日本，或可作為國內後續推動上的參考。。

<u>龔副主委表示：</u>

在跨境資料在地化方面，我國與其他國家立場相同，就部分涉及公眾利益之資料仍須以在地化加以限制，惟限制範圍仍有討論空間；至於加入 APEC 的 CBERs 機制方面，臺灣將朝參與之方向邁進，我方將於回國後另召開跨部會會議，研商我國於 APEC 加入 CBPRs 的做法。

4. **第三場次「物聯網及智慧城市」**

美方政府及民間代表	
講者	商務部國家標準與技術局 (NIST) 助理所長 Sokwoo Rhee
報告重點	1. 物聯網與智慧城市發展速度不如預期的關鍵： (1) 因為規格眾多且欠缺共通性(interoperability)，造成供應鏈無法達成經濟規模，同時各個城市也不易直接複製其他城市的成功經驗。 (2) 缺少能夠量測效益的指標系統以呈現智慧城市的推動成果，間接降低其他都市採用智慧城市解決方案的意願。 2. NIST 在推動智慧城市上所扮演的角色： (1) 建立並展示一個能夠被複製、能夠規模化、具永續性的模型。 (2) 以上面的模型孵育具有共通性、依據共識標準而發展的物聯網解決方案。 (3) 展示智慧城市的可量測成果(例如環境減碳量)。 3. 除了 NIST 以外，美國同時也有運輸部與 NSF (National Science Foundation, 國家科學基金會)等單位在推動智慧城市。 4. 目前全球城市挑戰(Global City Team Challenge, GCTC)正進展至第二階段，重點目標是找出有部署經驗、且可被複製到其他城市的智慧城市解決方案，並將能夠採用同一解決方案的城市形成「超級集合」(super cluster)，以降低佈建成本。2016 年 10 月 GCTC 將集合關係人舉辦「超級集合」啟動會議。希望未來臺灣能夠持續參與 GCTC 運作「超級集合」的活動，加深合作力道。
講者	Qualcomm 副總裁 Steve Crout
報告	1. 行動服務已經非常普及。舉例而言，根據調查 68%的受測者表示

重點	睡覺時必須有手機在旁邊。 2. 在 2020 年 Qualcomm 預估將有 250 億件物聯網裝置，這些裝置將能形成並引動許多新服務的誕生。 3. Qualcomm 目標在於成為智慧城市聯網基礎設施的主要供應商 4. 三個加速智慧城市發展的重點策略： (1)REIMAGINE 重新構築都市的新管理模型； (2)REUSE 重複使用現有的城市基礎建設； (3)From single to multi-purpose 單一設施多用途使用。 5. 案例： (1)紐約電話亭變成 WiFi 熱點 LINKNYC。 (2)BIGBELLY 智慧垃圾桶能偵測垃圾量，並協助垃圾車規劃最佳路徑。 (3)與台南市合作 4G 智慧城市計畫，提供學童 LBS 適地性行動教育教材。 6. 智慧城市政策發展的關鍵： (1)標準(Standard)與共通性(interoperability)的建立； (2)採購策略的調適； (3)隱私與安全性提升； (4)政府支援示範性計畫； (5)藉由如 GCTC 等平台進行城際/國際協作提升推動效率。
我方政府及民間代表	
講者	經濟部工業局副局長 呂正華
報告	1. 物聯網的出現，直接創造了許多典範轉移，從而改變了產業生產

重點	的結構、關鍵競爭力、產業生態系、與價值鏈的關鍵活動。 2. 在政策上，包含美、日、韓等國均將發展 IoT 技術、以及藉由創造公司合作與建立測試場域做為推動 IoT 產業發展的方向。 3. 在臺灣，我們可以看到在不同 IoT 階層上，產業均有重視的領域、亦有指標性企業： (1)在應用層，臺灣主要聚焦在製造、能源與醫療應用的開發。 (2)在網路層，臺灣主要聚焦在閘道器、車載資通訊與微基地台。 (3)在感知層，臺灣主要聚焦在自我感知網路、感測器整合與微型感測器的研發。 4. 然而，在產業積極發展趨勢的同時，臺灣 IoT 產業也正同樣面臨數項挑戰： (1)缺乏具國際競爭力之大型 SI 廠商； (2)缺乏刺激共通的平台； (3)缺乏自主核心關鍵技術。 5. 為了克服上述的產業挑戰，臺灣政府規劃了「亞洲．矽谷行動方案」做為物聯網發展總體計畫，其四大總體策略為： (1)以培養人才、提供企業擴張資本與創造對新創友善的法規環境，建立強韌的新創生態系。 (2)建立一站式服務中心以整合矽谷與其他國際創新聚落研發能量，主動參與國際物聯網關聯標準訂定。 (3)整合臺灣硬體製造優勢至軟體應用。推動大學與科研機構成果商用化。 (4)建立良好網路環境，建立多元智慧應用測試場域，並發展智慧物流、智慧運輸與智慧醫療等應用。 6. 過去幾年台灣已經有與國際共同發展物聯網與智慧城市應用的成果，並且掌握了部份推動智慧城市的心得，舉例而言：

	(1) 以影像監控技術為例，台灣便具有建立「警政雲」與結合攝影機技術至救災解決方案的經驗。 (2) 另外一個國際合作發展 IoT 應用的案例是「智慧路燈」，隨處可見的路燈，除了做為照明裝置外，更可以連接許多物聯網解決方案(此方向與網通大廠高通 reuse 與 multi-purpose 構想相契合)。 (3) GOGORO 則是都市電動移動方案，提供都市潔淨與便利的移動力，並成功進軍德國與荷蘭。 7. 在臺灣，公部門正學習將開放式創新與生態系的成長視為城市的進步成果。藉由共構、共營與共享三大原則，公部門提供創新最佳的測試場域。 8. 三個「連結」是台灣政府推動產業發展的要訣，在「三個連結」概念下，台美企業共同合作進軍國際，將能取得雙方最大利益： (1)「連結未來」，意指根據產業發展趨勢與臺灣優勢，規劃推動前瞻性的創新研發計畫。 (2)「連結國際」，意指依據所規劃策略性產業特性，連結全球科技先進國家。 (3)「連結在地」，意指串連各個創新研發基地，促進跨領域的創新，以及跨區域的整合。同時，台灣內部的在地需求，做為產業的先期市場和試驗基地，進一步推廣到國際市場應用。 9. 幾個臺美在智慧城市與物聯網產業合作的案例： (1) 臺灣企業與微軟共同進軍美國與全球電信市場。 (2) 微軟與經濟部簽署成立「物聯網產業發展中心」合作備忘錄。 (3) 臺灣資通產業標準協會(TAICS)與美國電信產業協會(TIA)簽署合作意向書。 (4) TAF 空總創新基地舉行產業技術支援中心「極客窩(Geek Cave)」開幕，集結臺美重要廠商。

	10.國際合作研發的成果，需要被放在大型的測試場域內以驗證其能耐，並被世界消費者與供應鏈覺查。為了達成此項目的，臺灣積極藉由主辦包含 WCIT 等各項國際活動的機會，將活動做為為大規模展示與測試我國物聯網科技發展成果的測試場域。 11.未來在產業與政策上，台美均有更深入合作的空間。
講者	宏碁雲科技技術總監 杜介甫
報告重點	1. 聯網僅是基礎，物聯網發展重點在於有沒有服務能夠提升生活品質。 2. 資料分析所產生出來的洞見(INSIGHT)，是服務是否具有價值的關鍵。 3. IT 技術與 OT 技術(operation technology, 運轉設備的技術)的融合，則是是否能實現服務的技術關鍵。 4. 邊緣(EDGE)資料處理能力、以及 M2M 連線技術均為技術關鍵。 5. 案例： (1)貓咪餵食器提升與寵物互動。 (2)銀髮族藉由平版取得各種照護服務。

5. **第四場次「數位金融」**

美方政府及民間代表	
講者	商務部國貿局金融及保險產業辦公室(OFIII)資深國貿專員 Vincent Tran
報告重點	1. 介紹該辦公室之負責業務及組織目標，其係主管美國金融服務輸出等之政策制定，吸引外人投資，以促進美國金融業之發展。OFIII

	發布金融科技首要市場報告(FinTech Top Market Report)，並訂定金融科技的發展計畫，以協助美國金融科技對海外發展。 2. 金融科技近年發展迅速，目前兩家最大的網路借貸公司 Lending Club 及 Prosper 之貸款金額總計由 2009 年的 2.6 億美元躍升至 2014 年的 17 億美元。預計 2017 年亞太地區會有將近 30 億智慧手機使用者會為美國金融科技公司帶來相當大的商機，而預期亞太地區銀行亦會將金融科技作為未來營運的發展重點。 3. 金融科技為破壞式創新，改變金融服務以及金融消費習慣，目前美國各大金融服務業等相關機構均投入很大資源研究開發金融科技，未來的發展及所伴隨的風險均應關注。 4. 其他主管機關與國際組織合作，積極推動金融科技，舉辦宣導會及研討會等，並研訂金融服務貿易國際談判策略與立場，以降低美國金融服務業發展金融科技之貿易障礙，未來也希望與我國加強合作，促進雙方之金融服務貿易。
講者	數位商會總裁 Daniel Spuller
報告重點	1. 簡介 Chamber of Digital Commerce，該機構致力推動發展數位經濟有關之商業活動，成員為美國創新業者、區塊鏈(BLOCKTRAIN)有關之機構投資人與業者，如創投公司、軟體科技公司，全球性 IT 顧問公司、金融機構，及投資公司等。 2. 該機構近期積極發展區塊鏈技術，今年 9 月並於美國華府成立區塊鏈研發中心，該中心旨在協助聯邦及州政府之監理官員及國際組織瞭解區塊鏈及其未來發展潛力，由於區塊鏈技術能強化交易安全與效率，運用方面廣泛，包括金融交易等範疇，相信未來會獲得更多金融機構的重視，並會有更快速的發展。
我方政府及民間代表	
講者	金融監督管理委員會駐紐約辦公室主任 蘇慧芬

報告重點	1. 簡介我國金融監督管理委員會近年推動金融科技之重要措施，包括於 2015 年成立金融科技辦公室，並於 2016 年 5 月推出金融科技白皮書，另於 2016 年 9 月制定金融科技發展 10 項計畫。旨在維護金融市場的安全、效率及公正原則，積極推動發展金融科技的相關措施，包括促進行動支付的使用率、鼓勵金融業與 P2P 業者合作爭取更多商機、提升群眾募資平台的健全發展、促進保險業者利用大數據設計更合適的保險商品、建立網路基金公司、培育金融科技人才、研發數位帳簿業務及分散式帳簿技術以加強金融交易效率與安全、成立金融資訊分享與分析中心、建立認證服務中心。 2. 金管會大力推動金融科技的同時，也要求金融服務業者與 P2P 平台業者注意遵守法令規定，風險管理與消費者權益的保障，並積極與各相關單位合作及吸取國外發展經驗，以建制安全與效率的金融科技環境。
講者	向威國際聯合投顧董事長 張世榮
報告重點	1. 分享運用金融科技提升金融服務的效率，金融科技是金融業者未來的趨勢，國際間都致力提供金融科技業者順利發展的環境。 2. 金融科技與資訊傳輸息息相關，例如在實務從事保險經紀業務方面，於核保的過程中必須把數據信息資料傳輸給保險公司做核保，保險公司的核保人員有可能在境外第三地使用數據，同時保戶的數據是儲存在美國或第三地，因此跨境數據傳輸以及儲存為重要的關鍵。建議提供數據傳輸技術服務的廠商可每年做合規的認證，以提升金融交易的資訊安全。

(四)官方閉門會議

1. **網路治理論壇(IGF)及「全球合作暨訓練架構」(GCTF)**

(1) 美方指出，IGF 係由各國關注網路治理之公民團體所組成，

2014 及 2015 年分別在土耳其及巴西舉辦，2016 年 12 月在墨西哥舉行，盼我國參加。IGF 為聯合國經濟及社會事務部(DESA)支持之特別計畫，惟非聯合國專門機關或附屬機構，願協助我參與。我國表示刻積極參與「亞太網路治理論壇」(APrIGF)，亦樂在美方協助下有意義參與 IGF。

(2) 美方盼臺美持續在 GCTF 下合作，在數位經濟方面則盼臺美合作減少數位落差，達成全球互聯互通目標。我方感謝美方提供相關資訊，並願就數位經濟倡議續與美方合作，GCTF 聯合委員會將於 2016 年 11 月在台北舉行，樂見臺美雙方持續合作。

2. **TPP 協定中與數位經濟相關之議題提問**

我方由經濟部國際貿易局宋明豪專門委員提問，美方由團長 Sepulveda 大使親自回應，重點如下:

(1) **Q**：亞太地區是否就 TPP 協定電子商務之消費者保護，特別是詐欺及欺罔性質的商業活動，有區域性的合作倡議防堵這類行為?

A：渠所知並無，惟願再行確認後回復。

(2) **Q**：電子商務及數位經濟的新典範是否影響美國聯邦政府的政府採購政策? TPP 協定明白將政府採購排除在電子商務專章的適用範圍，例如在地化及跨境資料自由移轉等規範倘不適用政府採購活動，是否對美國聯邦政府採購在選擇得標廠商時有所影響?

A：不影響。美國聯邦政府之政府採購規範中應無在地化要求，故無此問題。惟願再行確認後回覆。

(3) **Q**：TPP 協定未將金融服務業納入跨境資料自由移轉及計算設施不應強制在地化的規範，造成美國金融服務業者反彈。

請問美國對此的政策意涵為何? 是否表示美國會透過其他方式，來彌補金融業因排除適用造成的影響?

A：渠了解本案爭議點在於主管機關希望能夠確保美國金融監理所需資料，能留在美國。但美國政府同時並未對金融業提供任何補貼措施，藉以彌補無法透過金融資料自由跨境傳輸所損失的競爭力。

(4) **Q**：TPP 電子商務相關規範揭示數位產品必須享受不歧視待遇，但是廣播電視被排除。提出這樣排除的好處何在?

A：美國各地均有地方電台，在美國相關議題的爭議在於有些時候業者透過如亞馬遜或 YOUTUBE 播放節目時，地主國會要求這類的服務提供者播出一定比例之地主國節目，但是這樣的市場實在不大，對這樣的做法好或是不好見仁見智，站在美國的角度這並非好事。

(5) **Q**：TPP 智財權就數位環境下的商標侵權，均訂有刑事及民事責任處罰的規定及其應遵循的程序。在傳統非虛擬世界的商標侵權很容易想像其態樣，在數位環境下的可能商標侵權態樣為何?

A：透過電子傳輸時，主要各界關切的是屬於非法盜版、散佈具商業價值之著作權物。惟願就商標部分再行確認後回覆。

(6) **Q**：一般而言，TPP 協定之電子商務相關規範不允許在地化措施，除非基於合法公共目的。臺美均為法治國家，依法行政，請問有所謂基於「非合法公共目的」的在地化措施嗎?

A：事實上並沒有所謂的「非合法」的公共政策目標，會出問題的是當在地化措施變相成為達成特定合法公共政策目標(如保護隱私、國家安全等)的唯一手段，但是實際上政策主管機關還有很多可以選擇的替代性做法，不見得要用在地化措施。

三、 DEF 會議第 2 天(10 月 14 日)

DEF 第 2 天(14 日)中午舉行論壇閉幕暨「臺美在網路時代之合作展望座談會」(Prospects for Taiwan-US Cooperation in the Internet Age)，雙方團長宣布本屆 DEF 聯合新聞聲明內容；座談會由喬治華盛頓大學 Elliott 國際關係學院 Sigur 亞洲研究中心主辦，參與者包含 DEF 臺美雙方代表團人員、TECRO 人員、學生與研究人員，以及媒體記者等。

(一)座談會前閉門午餐會

論壇閉幕暨座談會舉行前，我方團長龔副主委、美方團長 Sepulveda 大使、TECRO 高大使等主要貴賓進行閉門午餐會：

1. S 大使表示，本屆 DEF 討論熱烈精彩，成果豐碩，甚榮幸代表美方與談。國務卿凱瑞(John Kerry)甚為重視數位經濟及資通訊相關議題，臺灣及阿根廷係美推動此議題最新合作夥伴，尤以臺灣資通訊成就傲人，允值與其他國家分享成功經驗。S 大使另稱，美方鼓勵我參與「網路治理論壇」(IGF)，國務院法律顧問已研究臺灣參與本論壇之可行性，初步認為可行，將提供相關資訊予我方參考。

2. 高大使復以，欣見臺美於數位經濟深度交流合作，此當符蔡總統揭櫫之「亞州・矽谷」政策內涵，有助加速我國產業轉型升級及進一步提升經濟。臺美各領域均具蓬勃及緊密之夥伴關係，係美值得信賴且不可或缺之區域夥伴，雙方並透過「全球合作暨訓練架構」(GCTF)將雙邊合作能量擴展至多邊領域，協助第三國能力建構，本年在公共衛生、婦女賦權、資通訊及能源等四大領域辦理相關研討會，獲正面迴響成效甚佳。

(二)論壇閉幕暨座談會紀要

1. 雙方團長宣布本屆 DEF 聯合新聞聲明內容，包含：臺美透過 DEF 推動數位經濟合作、擴大鏈結臺美創新創業發展利基、臺美智慧

城市及物聯網技術合作，以及臺美通力合作縮短全球數位落差等。另，美方團長 S 大使就中央社(Central News Agency)記者所詢「過往似無 FTA 於國會跛鴨會期通過之先例，歐巴馬行政團隊何以對 TPP 可在跛鴨會期通過持有信心」回應以：TPP 於跛鴨會期通過與否目前尚難斷言，惟所有美國行政部門送進國會之 FTA，最後皆會通過，只是時間問題。

2. 座談會與談情形略以：

(1) 美台商業協會會長 Rupert Hammond-Chambers：臺灣產業發展重點應從電子業硬體代工製造轉向數位經濟領域，並形成產業群聚(clustering)。該會高度關切臺灣推動數位經濟發展之創新、貿易及投資政策，將密切注意今年下半年立法院預算審議時，對於「亞洲‧矽谷推動方案」等計畫之資源配置。

(2) 喬治華盛頓大學虛擬暨國土安全中心主任 Frank Cillufo：維持數位社會正常運作之關鍵，在於建立使用者對數位應用模式的信任，當前能源、金融、電信等基礎建設管理制度均已數位化，為民眾生活帶來便利，惟亦衍生駭客犯罪之風險。C 主任認為，網路安全防護機制宜由企業對企業做起，可避免政府主導造成之過度管制；而政府則應致力打擊網路犯罪，讓駭客付出高成本及代價，以遏止其犯罪動機。

(3) 美國華府智庫戰略暨國際研究中心(CSIS)中國研究副主任 Scott Kennedy：

－臺美推動數位經濟合作面臨之挑戰，包含：臺美對科技創新研發投入有待強化，且未來產業發展藍圖未見明確；臺灣對經濟發展的優先領域(水電等資源利用)意見分歧；兩岸關係停滯；美國總統大選期間 TPP 緩步不前，臺灣可能無爭取加入 TPP 第 2 輪談判之機會；中國大陸「紅色供應鏈」崛起，對於扶植產業補貼政策，衝擊臺美相關產業發展等。

－美國此次總統大選，兩黨候選人對於貿易議題皆無前瞻性見解，即便民主黨總統候選人 Hilary Clinton 勝選，可能在

國內政治壓力下將 TPP 重要章節以修定版本重新推動，或與 TPP 第 1 輪談判國家各簽協定。如此一來，TPP 就不會有第 2 輪談判，亦即臺灣爭取加入談判的機會已不存在。

(三)座談會後龔副主委回應記者提問

座談會後，聯合報(United Daily News Group)、香港中評社(China Review News Agency of Hong Kong)記者另向龔副主委詢問，關於數位經濟潮流下，臺灣經濟前景及「新南向政策」展望等議題。龔副主委回應以：

1. 近年全球貿易成長趨緩，主因商品貿易不如以往熱絡，惟依數位經濟發展趨勢觀之，未來跨境交易可能更多是透過網路、數位、服務型態進行，此將為各國帶來龐大商機，並成為全球經濟成長最大的動力來源。面對此重要之國際經貿趨勢，臺灣會努力發展成為一個有利創新經濟及永續發展的數位國家。
2. 「新南向政策」如何與數位經濟結合，以及其發展成功之關鍵：
   (1) 東南亞國家內需市場成長很快，未來兩年 GDP 總值就可能超過亞洲四小龍，惟其基礎建設仍需外力協助。而在數位時代，基礎建設發展途徑與過去不同，須透過物聯網等方式進行，我國在這方面有些基礎，如能與美國等先進國家整合發展，就能將解決方案應用於東南亞國家。由於臺灣在進軍東南亞市場，有文化上的利基，且技術又與歐美相通，所以能在促進東南亞數位經濟發展中扮演關鍵角色。
   (2)「新南向政策」與臺商在中國大陸既有市場不是互相取代，而是新的擴展。東南亞市場很新、很大，有很多機會，中國大陸企業如阿里巴巴等也進軍東南亞，與臺灣企業存在競合關係；且中國大陸供應鏈硬體較強，臺灣則在軟體上較有經驗，兩岸本來就有很大合作基礎與空間存在。龔副主委特別強調：「我不認為這是一個互斥，實際上可以互補。」

參、 會後聯合新聞聲明重點

一、 臺美透過 DEF 推動數位經濟合作

臺美雙方將在既有基礎上擴大在建構數位經濟發展環境、數位貿易、物聯網、數位金融等重要面向合作。

(一)雙方支持以下工作：建立促進數位經濟之創新、貿易、投資及成長之政策與法規環境；以及公平、透明與可預測之政策與法規環境；包容、開放、透明化之網路治理制度;促進隱私權保護及跨境資訊流通。

(二)雙方支持促使數位貿易蓬勃發展之高標準原則，並承諾透過自由開放的網路與無邊界之商務來促進數位經濟。

二、 擴大鏈結臺美創新創業發展利基

(一)雙方強調促進創新創業發展，以及促進臺美創投業者、創業群聚及創新業者更緊密的合作，包含：強化兩國人才、技術及資金鏈結；增進臺美新創社群交流；促進兩國優質加速器、育成中心合作等。

(二)雙方確認智慧財產及授權對擴大雙向技術貿易與投資的重要性，未來將加強合作促進臺美技術移轉，以促成新創事業突破技術瓶頸。

三、 臺美智慧城市及物聯網技術合作

與會者分享智慧城市計畫發展現況，並鼓勵雙方進一步合作，經由美國國家標準與技術局(NIST)與我國國發會於全球城市團隊挑戰計畫(GCTC)及「物聯網促進智慧城市架構」下之公共工作群，研究智慧城市及物聯網技術。

四、 臺美通力合作縮短全球數位落差

雙方探討透過全球連結倡議(Global Connect Initiative)合作擴大網路連結，達成至 2020 年增加 15 億上網人口的目標；臺美雙方續於去(2015)年簽署「全球合作暨訓練架構」(GCTF)備忘錄基礎上，執行以

擴大網路連結及縮短數位落差為目標之聯合計畫，將藉由整合資源，協助其他國家或地區縮短數位落差，共同為打造全球繁榮前景努力。

肆、 觀察建議及後續應辦事項

一、 會議觀察與建議

(一)美盼與臺灣加強數位經濟合作

1. 近年數位經濟巨幅成長,對全球GDP之影響料將超越實體商品，美國視為下世代經濟成長引擎,確保數位經濟規範之主導地位允為美重要國家利益。在雙邊方面，美國積極拉攏日本、韓國及印度等國舉行 DEF 及相關對話，多邊方面，則積極透過 APEC 及 WTO 等場域推動數位經濟標準「美規化」。

2. 美方原規畫本論壇每 2 年舉行 1 次，為利新任政府持續與我就數位經濟進行對話與合作，特於今年總統大選前召開第 2 屆，以期本論壇定位為臺美年度例行會議，亦顯示美方重視臺灣在此領域之實力。AIT 於近期持續與本會接洽，就本屆會議所達成共識，積極規劃實現雙邊合作項目；臺美雙方技術議題之交流與合作，應作為未來雙方互動之主場，建議我續與美加強數位經濟之對話與合作。

3. 另據國務院臺灣協調處表示，中國大陸駐美大使館官員曾向美方抗議此次臺美舉辦 DEF，一如上年中方抗議國務卿科技顧問 Vaughan Tukekian 訪臺召開首屆論壇。中方抗議固旨在阻撓臺美高層交往，惟亦顯示中美雙方在數位經濟上之較勁，美國力主跨境資料流通、防止在地化障礙、提高透明度及現代化專利保護等高標準無一不觸及中國大陸關切，建議未來我政府於論述數位經濟相關政策時，強調我與美共同提昇國際規範之努力。

4. 本案在國發會與 AIT 針對會後聯合新聞聲明文稿內容之接洽協調過程，雖因雙方有不同立場，而多次來回斡旋，惟從互動中體認到美國務院希望透過此一技術性議題交流之平台，強化與台灣

合作之關係之用心。在國際情勢詭變之時局下，臺灣應利用此類臺美技術性議題交流之平台，鞏固並加強臺美雙邊經貿合作關係。

(二)美方盼我參與「網路治理論壇」(IGF)

1. 美方主持人 Sepulveda 大使數度提及願助我方參與 IGF 並派員出席本年會議。IGF 係於 2006 年由聯合國秘書長宣佈成立之特別計畫，由聯合國經濟及社會事務部(DESA)督辦，旨在提供平台廣納多方利害關係者(multi-stakeholder)在網路討論公共政策議題；本年(第 11 屆)IGF 會議訂於 12 月 6 日至 9 日在墨西哥 Guadalajara 市舉行，目前核准與會單位包含：政府代表團、政府間國際組織、公民社會團體、私營部門及科技社群等。

2. 經查交通部轄下之財團法人台灣網路資訊中心往年即以 NGO 名義定期參與，AIT 在訪團返國後續關切本案，本會業將相關資訊告知 AIT。

(三)我國可借鏡美方低度管制策略以促進產業創新

1. 數位經濟時代，政府監管機關制訂規則的速度已遠遠落後於商業模式變形的速度，監管機制可能反而遏制創新活動，其角色實應由主動干預市場競爭，轉換至促進新舊業者競爭，由市場發揮動態競爭、誘發創新以增進社會整體福祉之作用。

2. 建議我國可借鏡美方採取低度管制策略(Light Touch Approach)之經驗，建立可限縮影響範疇的場域允許法規未及之創新，真正提供「實驗場域」之價值，例如，將正在測試階段商業模式限縮在特定時空的實體「實驗特區」或虛擬「法規沙盒」，以解決市場穩定與產業創新上的兩難。

(四)美建議我參與 APEC「跨境隱私保護規則體系」(CBPRs)

1. 美國在 APEC 等國際場域提出多項數位經濟相關之倡議，會中美方多位代表提及 APEC CBPRs 及該機制可對各經濟體帶來的正面效益，並鼓勵我國加入 CBPRs。惟我國因為個人資料保護法

之主管機關為法務部，而個案處理之主管機關為各中央目的事業主管機關，並依據行業別由各中央目的事業主管進行監管，並無單一的隱私主責單位，爰目前暫無法依該制度要求，指定單一之主管機關代表我國申請加入該制度。

2. 有鑒於跨境隱私保護為當前國際合作的重要議題，且該制度為美國在國際場域力推，尤其在 APEC 強力推動 CBPRs，規範獲認證之企業進行跨境資料傳輸之行為，我國如不能加入，未來我業者若從事跨境資料傳輸行為，恐因未能取得國際認證獲得信賴，而喪失國際商機；我國應評估積極參與；爰我國是否比照日本先前做法，將相關部會共同列入，亦或修改個資法，設定單一專責機關，有待決定。

二、 後續應辦事項

(一)第 3 屆 DEF 可能於明(2017)年下半年在臺北召開，相關辦理時程後續將與美方協調規劃。

(二)有關 DEF 所發布之聯合新聞聲明中所提臺美後續合作工作，包括數位經濟各項工作之合作、創新創業擴大鏈結、智慧城市及物聯網技術合作、合作縮短全球數位落差等，請各主政機關積極推動辦理。

(三)為因應數位經濟潮流，完備我國數位經濟發展環境，並將落實到國家發展計畫(106-109 年)中，請各部會參考國際間發展的政策，結合我國發展條件，積極研議及辦理相關法規與機制調整工作。

(四)有關美方建議我國於 APEC 加入 CBPRs 部分：

1. 依 105 年 10 月 25 日行政院國際經貿策略小組第 15 次會議院長指示，我國應積極參與 APEC 場域所推動之數位經濟倡議，尤其是參與 CBPRs 事，請本會主持協調我方做法。

2. 本會已於 105 年 11 月 7 日邀集各部會召開第 1 次研商會議，決議由本會、外交部與經濟部(貿易局、商業司)統一說詞，回應美方關切我方是否承諾加入 CBPRs；另考量參與 APEC CBPRs 體

系程序複雜，後續將由本會召集相關單位組成工作小組，協調我國參與 CBPRs 之方式與時程。

伍、 附件

一、代表團名單

二、行程表

三、第 2 屆 DEF 議程

四、DEF 會議第 1 天(13 日)各場次簡報

五、新聞稿及中、英文聯合聲明

六、會議暨活動照片

附件 1

第 2 屆臺美數位經濟論壇－臺灣代表團名單

序號	姓名	單位	職稱
1	龔明鑫	國家發展委員會	副主任委員
2	張惠娟	國家發展委員會(綜合規劃處)	處長
3	蔡瑞娟	國家發展委員會(綜合規劃處)	專門委員
4	何昇融	國家發展委員會(綜合規劃處)	視察
5	林季鴻	國家發展委員會(綜合規劃處)	專員
6	林思文	國家發展委員會(綜合規劃處)	專員
7	陳育靖	國家發展委員會(法協中心)	科長
8	曾美幸	行政院國家發展基金管理會(業務組)	組長
9	柴惠珍	行政院科技會報辦公室(科技創新組)	主任
10	吳兆琰	行政院科技會報辦公室	研究員
11	呂正華	經濟部工業局	副局長
12	宋明豪	經濟部國際貿易局	專門委員
13	吳美甘	經濟部國際貿易局	專員
14	蘇慧芬	金融監督管理委員會紐約辦事處	主任
15	黃謀信	法務部綜合規劃司	副司長
16	李世德	法務部法律事務司	科長

序號	姓名	單位	職稱
17	郭戎晉	資策會科技法律研究所	組長
18	鄭兆倫	資策會產業情報研究所	資深分析師
19	張世榮	向威國際聯合投顧	董事長
20	洪志鵬	雲沛創新集團	行銷長
21	杜介甫	宏碁雲科技公司	技術總監

附件 2

第 2 屆臺美數位經濟論壇－臺灣代表團行程表

時間	行程 (含拜會單位及代表)	出席人員
10 月 10 日		
10:10	台北→美國華府	
10 月 11 日		
10:00-10:30	**會晤商務部「國家標準與技術局 (NIST)」** 代表：主管實驗室計畫助理所長 Dr. Kent Rochford, Associate Director for Laboratory Programs, NIST	1. 國發會 龔明鑫 副主委 2. 國發會 張惠娟 處長 3. 國發會 林季鴻 專員 4. 工業局 呂正華 副局長 5. 資策會 鄭兆倫 資深分析師 6. 院科技會報辦公室科技創新組 柴惠珍 主任
10:30-11:00	**會晤商務部「國家標準與技術局 (NIST)」** 代表: 主管資訊技術實驗室副所長 Dr. James St. Pierre, Deputy Director , Information Technology Laboratory, NIST	1. 國發會 龔明鑫 副主委 2. 國發會 張惠娟 處長 3. 國發會 林季鴻 專員 4. 工業局 呂正華 副局長 5. 資策會 鄭兆倫 資深分析師 6. 院科技會報辦公室科技創新組 柴惠珍 主任
11:00-11:30	**會晤商務部「國家標準與技術局 (NIST)」** 代表: 主管網路實體計畫助理所長 Mr. Sokwoo Rhee, Associate Director for Cyber-physical Systems, NIST	1. 國發會 龔明鑫 副主委 2. 國發會 張惠娟 處長 3. 國發會 林季鴻 專員 4. 工業局 呂正華 副局長 5. 資策會 鄭兆倫 資深分析師 6. 院科技會報辦公室科技創新組 柴惠珍 主任

時間	行程 (含拜會單位及代表)	出席人員
16:00-17:00	**會晤消費者金融保護局(CFPB)** ● 代表: -Dan Quan, Senior Advisor to the Director and head of Project Catalyst -John Pitts, Deputy Assistant Director, Intergovernmental Affairs -Jonathan Korn, Innovation Program Manager, Project Catalyst -Moira Vahey, Communications Division -Elizabeth Organ, Legal Division ● 地點: 1275 1st St. NE Washington, DC 20002	1. 金融監督管理委員會紐約辦事處 蘇慧芬 主任 2. 向威國際聯合投顧 張世榮 董事長
19:00	高大使工作晚餐 ● 地點:雙橡園	全團人員
10 月 12 日		
10:00-11:00	**會晤聯準會(FRB)** ● 代表: -David Reiser, Manager in Risk and Surveillance -Pamela P. Miles, Senior Supervisor Financial Analyst in Supervisory Oversight ● 地點: 20th St and Constitution Ave. NW Washington, DC 20551	1. 金融監督管理委員會紐約辦事處 蘇慧芬 主任 2. 向威國際聯合投顧 張世榮 董事長
13:00-13:45	**會晤國務院經濟暨商業事務局** ● 代表:代理助卿 Thomas S.	全團人員

時間	行程 (含拜會單位及代表)	出席人員
	Engle, Acting Assistant Secretary ● 地點:AIT/W	
14:30-15:45	**拜會「全球台灣研究中心」(Global Taiwan Institute，GTI)** ● 代表: -執行長 Russel Shiao -資深研究員 David Ann ● 地點: 1836 Jefferson Pl. NW Washington, DC 20036	全團人員
18:00	**團務會議及工作晚餐**	全團人員
10 月 13 日		
09:00-16:00	**DEF 會議** 地點:喬治華盛頓大學國際事務學院 State Room	全團人員
16:20-17:20	**官方閉門會議**	1. 國發會 龔明鑫 副主委 2. 國發會 張惠娟 處長 3. 國發會 蔡瑞娟 專門委員 4. 國發會 何昇融 視察 5. 國發會 林季鴻 專員 6. 國發會 林思文 專員 7. 國發會 陳育靖 科長 8. 國發基金 曾美幸 組長 9. 院科技會報辦公室科技創新組 柴惠珍 主任 10. 院科技會報辦公室 吳兆琰 研究員 11. 工業局 呂正華 副局長 12. 國貿局 宋明豪 專門委員

時間	行程 (含拜會單位及代表)	出席人員
		13. 國貿局 吳美甘 專員 14. 法務部 黃謀信 副司長 15. 法務部 李世德 科長 16. 金管會 蘇惠芬 主任 17. 資策會 郭戎晉 組長
10 月 14 日		
11:50-12:30	11:55-12:30 龔副主委、Sepulveda 大使、高大使等主要貴賓進行閉門午餐敘(張處長陪同)；其餘團員於會場用餐	全團人員
12:30-14:00	**DEF 成果發表研討會(喬治華盛頓大學安排)** ● 主題:臺美在網路時代之合作展望 ● 地點:喬治華盛頓大學國際事務學院 City View Room	全團人員
19:00	我方與美方工作餐敘 地點:漢宮大酒樓	全團人員
10 月 15 日		
18:40	美國華府→台北 (於 10 月 17 日 5:30 抵達)	

附件 3

2nd U.S.-Taiwan Digital Economy Forum
October 13, 2016
George Washington University – State Room

October 13, 2016
Industry and government session

Time	Mins	Topic
8:40-9:00	20	Arrival and Seating
9:00-9:35	35	**Introduction and Opening Statements** **Ambassador Daniel A. Sepulveda**, *U.S. Coordinator for International Communications and Information Policy, Bureau of Economic & Business Affairs, U.S. Department of State* **Dr. Ming-Hsin Kung**, *Deputy Minister, National Development Council* **John Norris**, Managing Director, *American Institute in Taiwan-Washington* **Stanley Kao**, *Representative, Taipei Economic and Cultural Representative Office (TECRO)*
9:35-9:45	10	[10 min] Remarks from Ambassador Robert Holleyman, *Deputy U.S. Trade Representative*
9:45-10:45	60	**"Light Touch" Policy and Regulatory Environment for a Digital Taiwan** [10 min] (US) A "Light Touch" Policy & Regulatory Environment, David Hu, Deputy Chief, Strategic Analysis and Negotiations Division, International Bureau, Federal Communications Commission [10 min] (T) Taiwan DIGI+ Policy, Ms. Huei Jane Tschai, *Director, S&T Innovation Unit, Office of Science and Technology, Executive Yuan* [10 min] (US) Josh Kallmer, *Senior Vice President, Global Policy, Information Technology Industry Council* [10 min] (T) Observation on Primary Digital Industries and Related Policy in Taiwan, Mr. Chao Lun Cheng, *Analyst, Market Intelligence & Consulting Institute, Institute for Information Industry* Discussion (20 min)

10:45-11:00	15	**Break**
11:00-12:30	90	**21st Century Standards for Digital Trade and Privacy** ***Digital Trade*** [10 min] (US) Mr. Sam duPont, Director for Information, Communication and Technology, *Office of the United States Trade Representative (USTR), Executive Office of the President* [10 min] (T) 21st Century Standards for Digital Trade and Privacy, Mr. Ming Haur Song, *Senior Executive Officer, Bureau of Foreign Trade, Ministry of Economic Affairs* [5 min] (US) Mr. Nicolas Bramble, *Policy Manager, Google* [5 min] (T) Ecommerce in Taiwan: Now and Next, Mr. Michael Hung, *Chief Marketing Officer, funP Innovation Group* Discussion (15 min) ***Cross border data flows and privacy*** [10 min] (US) Data Flows, Privacy and Digital Trade: The importance of Taiwan's participation in the APEC Cross-Border Privacy Rules System, Ms. Krysten Jenci, *Director, Office of Digital Services Industries, International Trade Administration, U.S. Department of Commerce* [10 min] (T) The Issue of Cross-Border data Flows in Taiwan's Personal Information Protection Act (PIPA), Mr. Mou Hsin Huang, *Deputy Director, Department of Planning, Ministry of Justice* [5 min] (US) US industry [5 min] (T) The Latest Legal Development and Trend of Market Response to Cross Border Data Flows, Mr. Jung Chin Kuo, *Section Manager, Science &Technology Law Institute, Institute for Information Industry* Discussion (15 min)
12:30-1:30	60	**Lunch – 7th Floor Reception area, Elliott School, GWU**

1:30-2:30	60	**IoT and Smart Cities: Structuring an Open Eco-system** [10 min] (US) IoT and Smart Cities, *Sokwoo Rhee, NIST* [10 min] (T) IoT and Smart Cities: Structuring and Open Eco-system, Mr. Richard Jang-Hwa Leu, *Deputy Director General, Industrial Development Bureau, Ministry of Economic Affairs* [10 min] (US) Mr. Steve Crout, *Vice President, Qualcomm* [10 min] (T) How to make Connected Home Smarter, Mr. Jeffery Tu, *Solution Architect , Acer Cloud Technology, Inc.* Discussion (20 min)
2:30-2:45	15	**Break**
2:45-3:45	60	**Financial Technologies** [10 min] (US) FinTech, Vincent Tran, Senior International Trade Specialist, *Office of Finance and Insurance Industries, International Trade Administration, U.S. Department of Commerce* [10 min] (T) Taiwan's Fintech Development, Ms. Fiona Su, *Director , Representative Office in New York, Financial Supervisory Commission* [10 min] (US) Ms. Perianne Boring, *President, Chamber of Digital Commerce* [10 min] (T) Implementation of FinTech in Asia, Mr. Michael Chang, *Chairman, Evergrow Securities Investment Consulting Co. Ltd.* Discussion (20 min)
3:45-4:00	15	**Closing Remarks**
4:00-4:20	15	Break
4:20-5:20	60	**Government to Government Future Cooperation** Digital Trade Global Connect Initiative Other items Joint statement

2nd U.S.-Taiwan Digital Economy Forum
October 14, 2016
George Washington University – City View Room

The Digital Economy Forum: Prospects for Taiwan-US Cooperation in the Internet Age Public Event - *Sponsored by the Sigur Center for Asian Studies*

12:00-12:30: Lunch
12:30 PM: Opening remarks: Stanley Kao, Representative, TECRO
12:35 PM: Opening remarks: AIT representative
12:40 PM: Panel remarks and discussion, with Richard Hammond Chambers (U.S.-Taiwan Business Council) and Frank Cilluffo, (GW's Center for Cyber & Homeland Security), possibly others TBD.
1:10 PM: Keynote Remark: Taiwan's National Development Council Deputy Minister
1:20 PM: Keynote Remark: Amb. Daniel Sepulveda
1:30 PM: Audience Q&A
2:00 PM: End of Event

附件 4

DEF 會議第 1 天(13 日)各場次簡報

雙方代表		講者	簡報資料
第一場次「數位經濟發展的環境與規範」			
美方	官方	聯邦通訊委員會(FCC)國際局策略分析及談判分析處副處長 David Hu	A “Light Touch” Policy & Regulatory Environment
	業界	資訊產業協議會(ITIC)資深副主席 Josh Kallmer	報告重點：數位經濟下之管理要項(未提供簡報)
我方	官方	行政院科技會報辦公室主任柴惠珍	Taiwan DIGI+ Policy
	業界	資策會產業情報研究所 MIC)資深分析師鄭兆倫	Observation on Primary Digital Industries and Related Policy in Taiwan
第二場次「21 世紀數位貿易與隱私規則」之「數位貿易」			
美方	官方	貿易代表署(USTR)資通訊組組長 Sam DuPont	報告重點：數位貿易之三大基礎規範、Digital 2 Dozen 之闡明(未提供簡報)
	業界	Google 公共政策經理 Nicolas Blamble	報告重點：跨境資料流動及隱私保護架構之重要性(未提供簡報)
我方	官方	經濟部國際貿易局多邊貿易組專門委員宋明豪	21st Century Standards for Digital Trade and Privacy
	業界	雲沛集團(funP)行銷長洪志鵬	Ecommerce in Taiwan: Now and Next
第二場次「21 世紀數位貿易與隱私規則」之「跨境資料移轉與隱私」			
美方	官方	商務部國貿局數位服務產業辦公室主任 Krysten Jenci	Data Flows, Privacy and Digital Trade: The importance of Taiwan’s participation in the APEC Cross-Border Privacy Rules System
	業界	資訊技術產業委員會(ITIC)資安及隱私政策副主席 John Mille	報告重點：跨境隱私保護架構之重要性、APEC CBPRs 可對各經濟體帶來的正面效益(未提供簡報)

雙方代表		講者	簡報資料
我方	官方	法務部綜合規劃司副司長黃謀信	The Issue of Cross-Border data Flows in Taiwan's Personal Information Protection Act (PIPA)
	業界	資策會科技法律研究所科技應用法制中心應用研究組組長郭戎晉	The Latest Legal Development and Trend of Market Response to Cross Border Data Flows
第三場次「物聯網及智慧城市」			
美方	官方	商務部國家標準與技術局(NIST)助理所長 Sokwoo Rhee	IoT and Smart Cities
	業界	Qualcomm 副總裁 Steve Crout	報告重點：IoT 發展趨勢、智慧城市之發展關鍵策略(未提供簡報)
我方	官方	經濟部工業局副局長呂正華	IoT and Smart Cities: Structuring and Open Eco-system
	業界	宏碁雲科技技術總監杜介甫	How to make Connected Home Smarter
第四場次「數位金融」			
美方	官方	商務部國貿局金融及保險產業辦公室(OFIII)資深國貿專員 Vincent Tran	FinTech
	業界	數位商會總裁 Daniel Spuller	美國 FinTech 發展及區塊鏈技術之概述(簡報不公開)
我方	官方	金融監督管理委員會駐紐約辦公室主任蘇慧芬	Taiwan's Fintech Development
	業界	向威國際聯合投顧董事長張世榮	Implementation of FinTech in Asia

A "Light Touch" Policy & Regulatory Environment

David Hu
Deputy Chief, Global Strategy & Negotiations Division
International Bureau
Federal Communications Commission (FCC)

2nd U.S.-Taiwan Digital Economy Forum • Oct. 13, 2016 • Washington, DC

Note: The views expressed in this presentation are those of the author and may not necessarily represent the views of the Federal Communications Commission.

Regulatory Framework

Regulatory framework underlying the light touch approach:

- **The FCC is both the policy maker and the regulator.**
- **The FCC is independent.**
- **The FCC is a converged regulator** → has authority over wireline, wireless, media, public safety, and other telecommunications matters, such as licensing, universal service, and transactions.

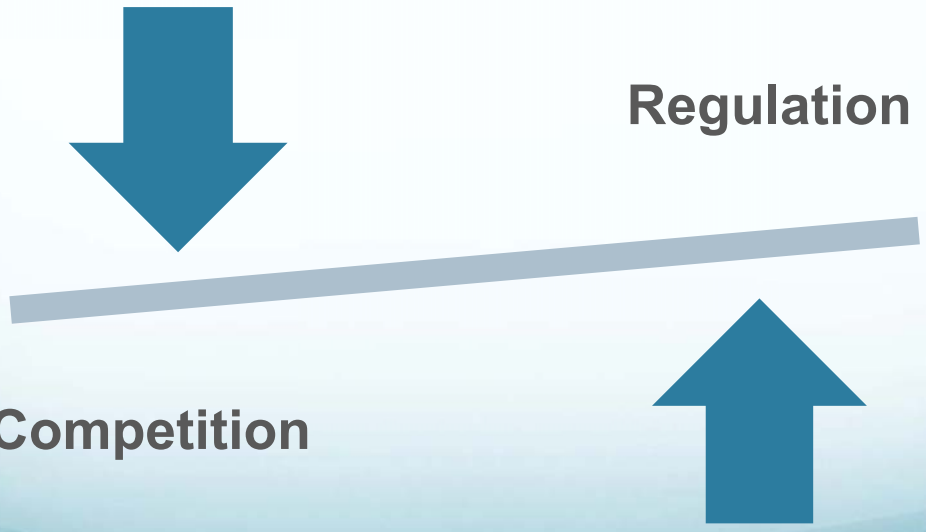
What Is A "Light Touch" Approach?

- Technology moves faster than our regulatory pen.
  - Rigid regulations can't keep up with the rapid pace of technological development.
  - We need an approach that can accommodate technological changes instead of hampering them.
- As opposed to prescribing rigid ex ante rules, our goal is to **facilitate an enabling environment in which market-driven, industry-led innovation can thrive**, thereby bolstering a vibrant digital economy.

What Is A "Light Touch" Approach?

(continued)

The "light touch" approach depends on the so-called "**regulatory see-saw**."



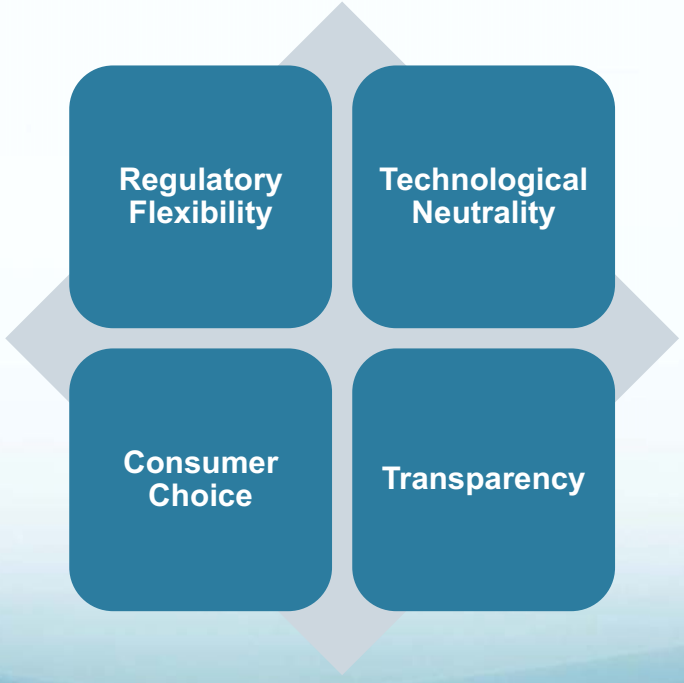
What Is A "Light Touch" Approach?

(continued)

FCC Chairman Wheeler describing a "new regulatory model designed for new network times" (June 2015):

"I keep describing this oversight as a 'referee on the field who can throw the flag'…Referees make sure the game is played fairly, they don't call the plays…Our job isn't to substitute the FCC for what should be hard-fought negotiation and tough competition. It's up to the players to compete hard against their opponents. But, make no mistake, if they violate the rules, we will blow the whistle. **We are arbiters of last resort, not first resort**."

Elements of a "Light Touch" Approach

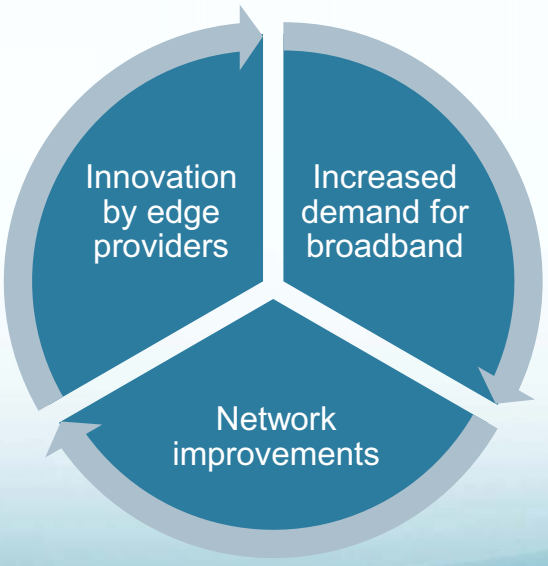


Scope of the "Light Touch" Approach

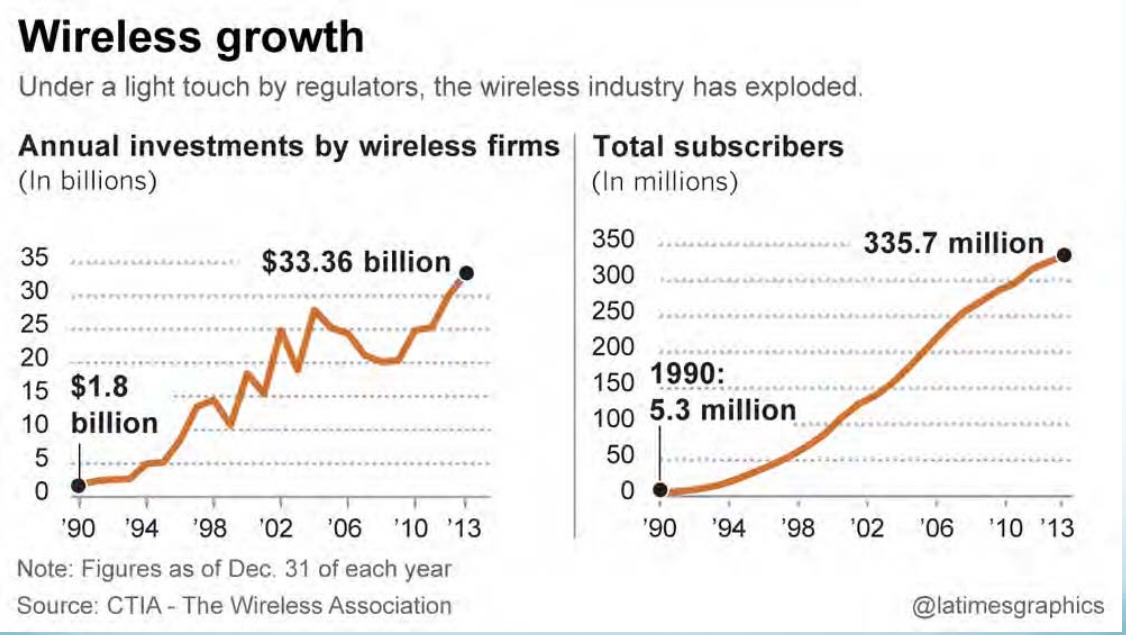
- A "light touch" approach does *not* mean a lack of government action where needed.
- When no rational business incentives exist in the market, it is the FCC's responsibility to step in to encourage and incentivize investment and deployment.
- Examples:
  - Universal service
  - Accessibility for persons with disabilities
  - Emergency communications

"Virtuous Cycle of Innovation"

A "light touch" regulatory approach supports the digital economy by creating a "**virtuous cycle of innovation**."



A "Light Touch" Approach Works



Source: LA Times.

Other Examples

- **Open Internet Order**
  - No "utility style regulation."
  - Instead, focused on ensuring that consumers have unfettered access to lawful content, applications, and services on the Internet.
  - Allowed us to advance and protect the "virtuous cycle of innovation."
  - Also demonstrated the open, transparent, collaborative rulemaking process.
- ***Spectrum Frontiers***
  - New flexible use service rules in four bands.
  - Adopted a variety of authorization schemes.
  - Did not specify technologies for bands → let industry and the market find the best use of the spectrum.
  - Did not define "5G" → industry-led standardization process.

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2016 U.S./Taiwan Digital Economy Forum

Taiwan DIGI+ Policy

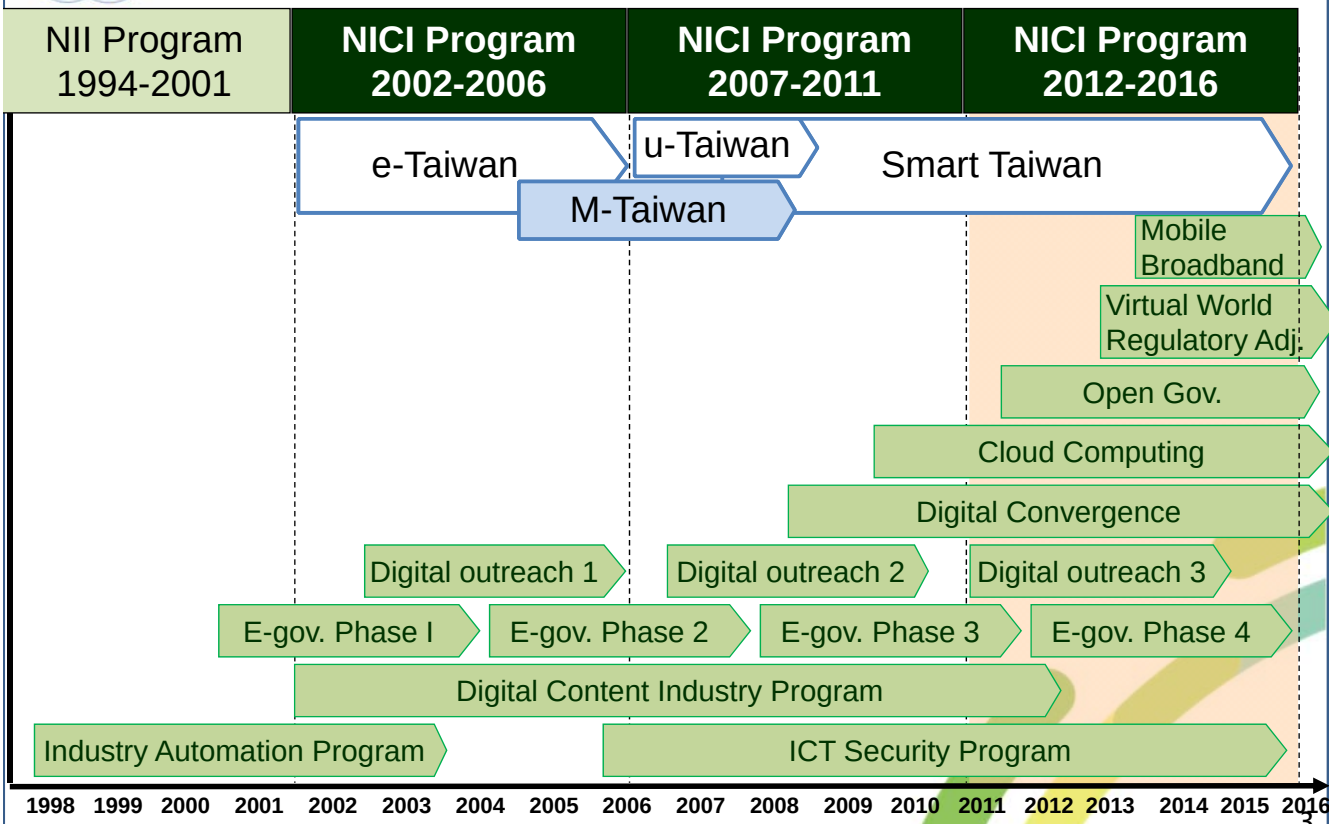
HueiJane Tschai
Director, S&T Innovation Division
Office of Science and Technology
Executive Yuan, Taiwan
October 13 2016

DIGI+ (2017 – 2025)

- **D** Development :: Stable Infrastructure
- **I** Innovation :: Digital Economy
- **G** Governance :: Smart Nation
- **I** Inclusion :: Civil Society

+ Major innovative industry policies
(green energy, biotechnology, smart machinery, national defense, Asian Silicon Valley)

Taiwan ICT Policy Status



Taiwan's Digital Power Achievements

BOST

WEF NRI Ranking

	2012	2013	2014	2015	2016
ICT Readiness	14	17	7	2	2
ICT Use	14	15	17	22	16
ICT Influence	3	6	7	15	20
ICT Environment	24	24	25	28	29
Rank	11	10	14	18	19

Source: WEF Network Readiness Index

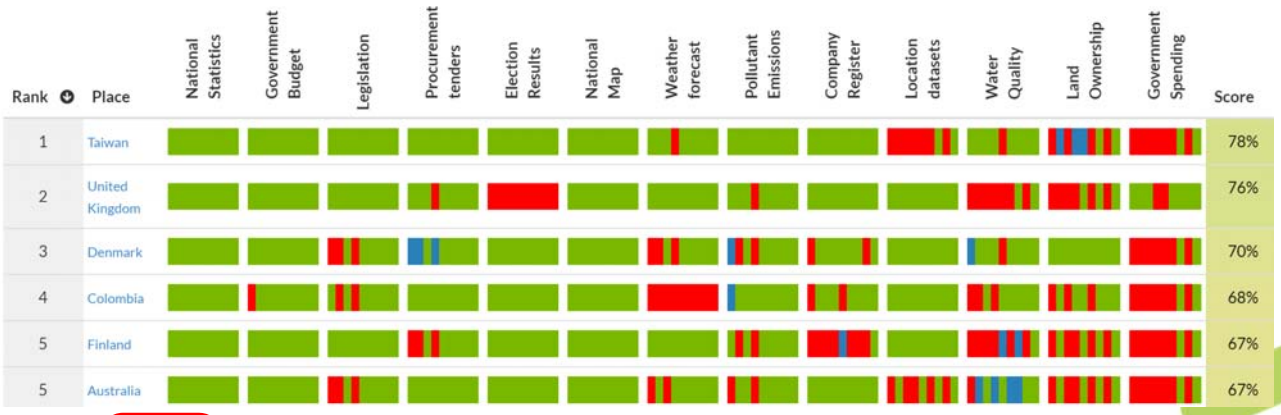
- Broadband network: with 100Mbps connectivity in 98% of families.
- Public services: satisfaction 77%
- Smart living industry: private investment NT 268.6 billion
- Internet access in rural area : 74%

Note: Recent growth in hardware has come from electronic components (semiconductor, flat panels, etc.)

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan Gross Domestic Industrial Production

Taiwan's Open Data Achievements

Taiwan ranked No. 1 in the 2015 Global Open Data Index



Year	Taiwan	Japan	South Korea	Thailand	Singapore	Indonesia	Philippines	China	UK	USA
2013	36	32	32	-	47	38	-	38	1	2
2014	11	19	28	59	66	45	71	58	1	8
2015	1	31	23	42	23	41	78	93	2	8

Source: http://index.okfn.org

5

From NICI To DIGI+

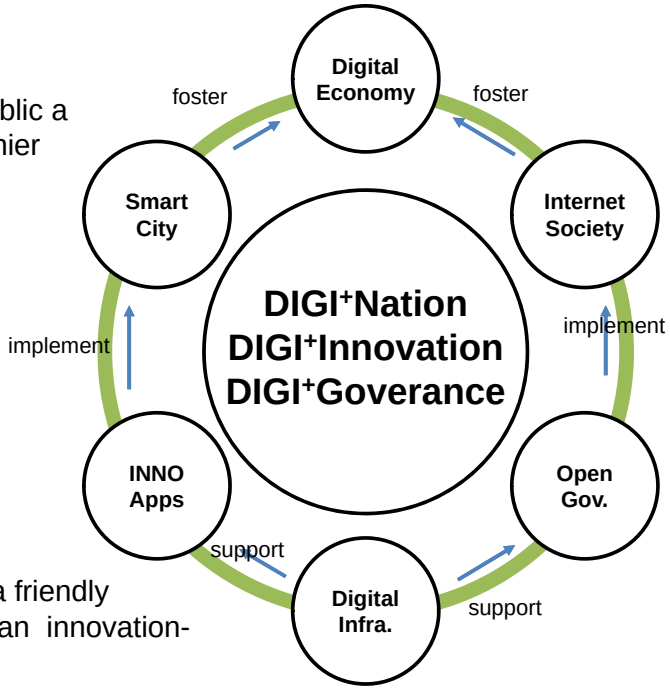
6

Vision and Objectives

Reshaping Taiwan's global competitiveness

Enhancing the power of developing value-added applications for the digital economy

Give general public a safer and wealthier society

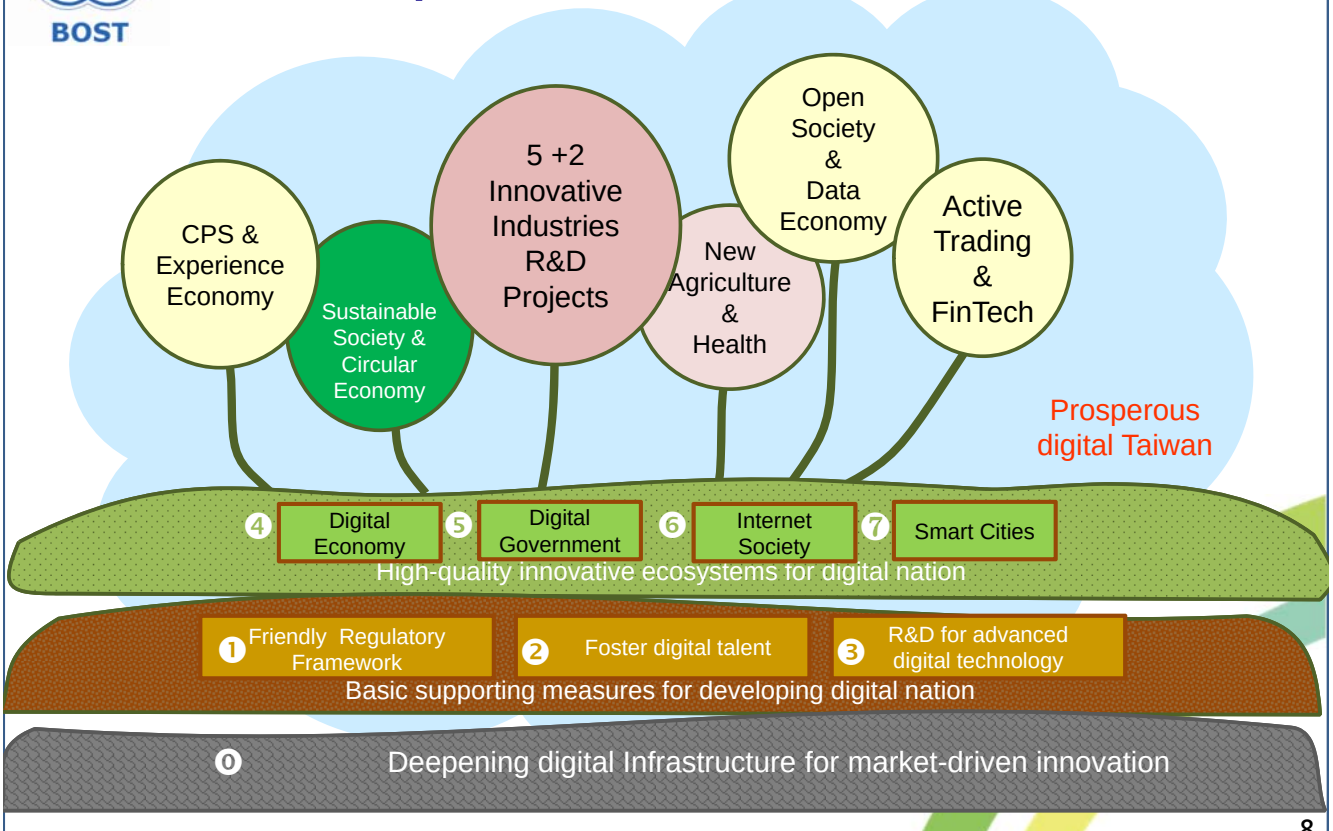


Build an internet society with mutual trust and agile development

Increase general public engagement and improve heart touching services

Making Taiwan a friendly environment as an innovation-driven country

Developmental Framework



Strategy

Value-driven Approach to Solve Structural Problems

- To enhance communication between general public and congress to accelerate establishing regulatory framework
- To deepen collaboration between central and local governments to equalize regional digital opportunities and to speed up regional innovation network
- To promote PPP collaboration to accelerate delivery of digital public services and to give innovative players reference records
- To bridge industry and academic resources to accelerate digitalization & innovation of all industries
- To encourage private sector's investment and leverage ICT superiority to create new startups and innovation-driven ecosystem

Stable Digital Infrastructure for Market-Driven Innovation

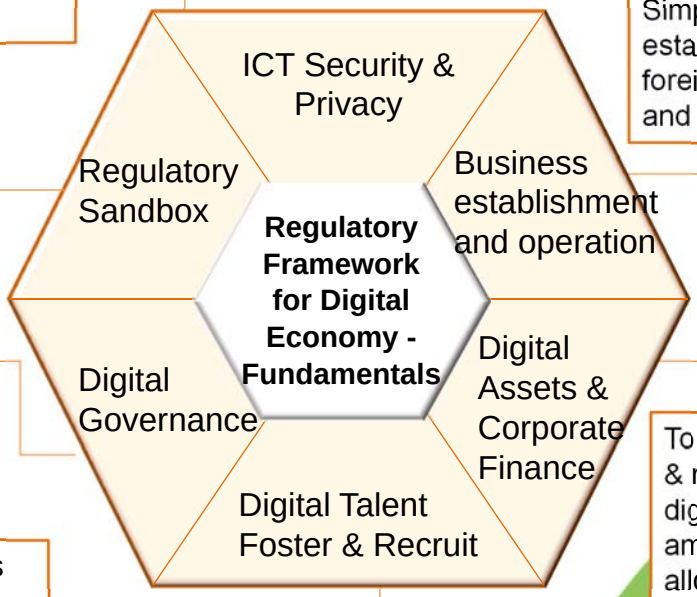
- To enhance affordable ultra broadband network under Gbps connectivity
- To develop spectrum policies to protect human rights
- To establish international green cloud data center cluster
- To implement cloud data center to integrate public & academic digital resources
- To amend regulatory framework to enshrine network neutrality
- To build digital identity management and electronic authentication center
- To design a strict, national-wide digital security system

Friendly Regulatory Framework

Drafting the ICT Security Act to prevent cyber crime and strengthen IP protection

Overall revision of the Company Act, Simplify the invest and establish process of foreign companies and etc.

To pilot FinTech sandbox



To exploit open internet & digital converge

To exploit ownership & registration of digital assets, and to amend regulatory to allow insurers to invest in limited partnership VC businesses

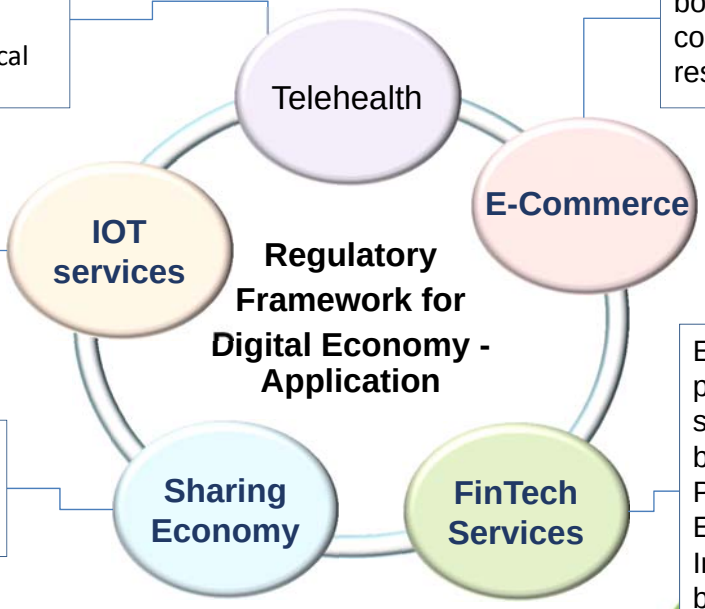
Adjust labor-related laws (telework), develop distance learning, enhance student digital skill etc.

Friendly Regulatory Framework

Telemedicine, telecare, Online Sale of Pharmaceutical Products and Medical Devices

Taxation of cross-border consumption, consumer dispute resolution

Unmanned vehicles (UAVs, unmanned vehicles, etc.)



Sharing car, house etc.

Encourage mobile payment creative services, collaboration between banks and P2P lending platforms, Encourage the Insurance industry use big data to create new insurance products

12

Foster Digital Talent

- To cultivate basic digital skills
  - To deepen basic digital education from elementary school
  - To increase digital talent in cross-discipline in college
  - To enhance public and private sectors' employees skills in digital usage
- To strengthen advanced ICT Specialists
  - To increase ICT related specialists
  - To strengthen public and private sectors' ICT specialist on-job training
  - To encourage enterprises to improve ICT hiring rate
- To recruit international digital talent

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R&D Advanced Digital Technology

Open source, open data, and open standard

- Advanced digital applications
  - FinTech, blockchain, data science, 3D printing, VR/AR, machine learning, AI, Robots, driverless car etc.
- New business models & innovative services
- 5G broadband, IoT technology
- ICT security, data privacy technology
- Cultural and creative related technology

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Growing Digital Economy - Promoting Digitalization of Industry

- To support the digitalization of five major innovative industry projects by cross-industry collaboration
  - green energy, biotechnology, smart machinery, national defense, Asian Silicon Valley
- To reduce the cost of broadband usage and website hosting
- To encourage businesses to integrate key digital technologies, such as e-invoices, cloud services, e-commerce etc.
- To shape global innovative strategic partnership

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Growing Digital Economy – Develop Digital Economy

- To focus on service type e-commerce, digital content, digital advertising, online games, O2O applications
- To facilitate digital commerce companies to link to global markets and access to growth capital
- To activate data marketplace for creating value-added digital services
- To expand usage of digital payments and third-party payments amongst citizens

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Growing Digital Economy – Shape Innovative Environment

- To leverage Taiwan's ICT hardware superiority and develop a comprehensive financial aid available for people starting new business with a particular focus on IT start-ups
- To link R&D institutions and entrepreneur groups to make innovations be quickly brought to market
- To assist entrepreneur and start-ups to engage global innovation resources
- To establish innovation regulatory sandbox to accelerate legal proof for disruptive innovation

17

Digital Government Transformation
- Open and Innovative Public Governance

- To offer one-stop cloud digital services for citizens and companies
- To build up Public Private Partnership (PPP) and increase citizen engagement to improve public services
- To improve digital governance system and professional development for digital talents
- To enhance digital convergence and digital economic authorities' capability
- To enhance ICT security and data governance related regulations

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Equal and Vibrant Internet Society

- To ensure equal digital opportunities for citizens by new digital legal basis for human rights
- To ensure equal digital access for rural areas and offshore islands
- To safeguard the rights of disadvantaged social groups to enjoy broadband usage with relevant support measures
- To integrate online communities and break new ground for diversified international partnerships

19

Create Sustainable Smart City

- To speed up smart city governance by enhancing collaboration between central and local governments
- Constructing heart touching and high-quality living environment for citizens by using large-scale Internet of Things(IoT) technology
- To bolster regional innovative ecosystem by strengthening link between universities, academic institutions, and SMEs

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Conclusion

- To learn from the United States and create high-value work opportunities and product/service opportunities in Taiwan
- Through bi-lateral collaboration, exchanges and sharing, Taiwan becomes the United States strong partner in science & technology, and the digital business development
- To jointly explore the international market economy by contributing Taiwan's superiority in e-Commerce, IT services, IOT tech, and innovation

Thank you for your attention

HueiJane Tschai
Director, S&T Innovation Division
Office of Science and Technology
Executive Yuan, Taiwan
htschai@ey.gov.tw

Friendly Regulatory Framework

BOST

Ongoing regulatory reforms and the scheduled completion time (1)

- Amend the Nationality Act：Conditionally loosen the regulations to allow high-level professional talent in various fields to acquire ROC nationality without having to forfeit original nationality. (02/01/2016 summited to the Legislative Yuan)
- Amend the Value-Added and Non-Value-Added Business Tax Act：requiring overseas businesses that provide services online to natural person buyers in Taiwan shall register with the tax authority in Taiwan. (09/01/2016 summited to the Legislative Yuan)
- Amend the Copyright Law：adjust the related regulations of tangible and intangible usage rights and reasonable use. (09/08/2016 summited to Legislative Yuan)
- Amend the Science and Technology Basic Law：allowing public academic and research institutions to independently dispose of R&D results incomes (or stocks). (09/14/2016 summited to the Legislative Yuan)
- Draft the Regulations on Innovation, Transformation, and Resignation in Higher Education. (Scheduled 09/2016 to summit to the Legislative Yuan)

23

Friendly Regulatory Framework

BOST

Ongoing regulatory reforms and the scheduled completion time (2)

- Drafting the ICT Security Act：strengthening the promotion of information and communication security policy and the authority of bodies responsible for its oversight and reducing and preventing information and communication security risks. (11/2016 to summit to Legislative Yuan)
- Amend the Civil Aviation Law：formulating draft special section on aerial drones. (12/2016 to summit to Legislative Yuan)
- Overall revision of the Company Act：differentiate the regulation of companies by size and increase company autonomy and operating flexibility. (03/2017 to summit to Legislative Yuan)
- Amend the Statute For Investment By Foreign Nationals：simplifying the administrative procedure for foreign nationals to set up businesses in Taiwan. (06/2017 to summit to Legislative Yuan)

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Friendly Regulatory Framework

Follow up matters for promotion

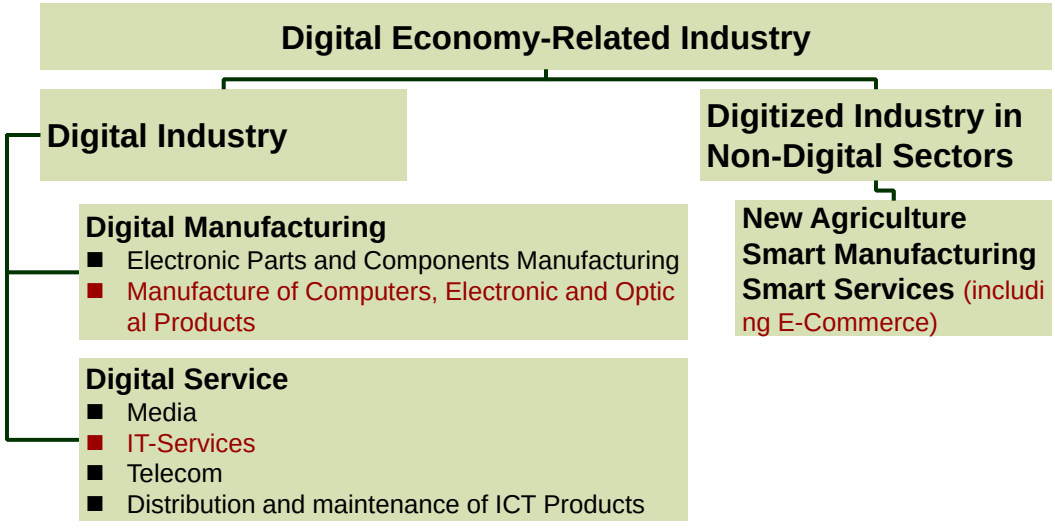
- Regulatory adjustment research on the application of working time regulations in the Labor Standards Law: In response to telework, digital economy work form and other trends, deliberate service industry related regulatory adjustment.
- Digital Communications Act draft bill, amendment of the Telecommunications Act: in response to the cross-industry and cross-border service development trends brought by digital convergence, carry out deliberation of related draft bills.
- Amendment of the Physicians Act: In response to the trends of telemedicine, investigate related laws and regulations internationally, scope of implementation and put forward feasible amendment suggestions.
- Deliberate the feasibility of institutionalization of telecare: deliberate telecare service related regulations; analyze the aspects of management, care and industry, clarify related problems and feasibility of institutionalization.
- Deliberate unmanned car related regulations: continue to follow the vehicle regulation development trends of the UN Economic Commission for Europe, review related regulations in Taiwan in a timely way.

Observation on Primary Digital Industries and Related Policy in Taiwan

Allen Cheng, Senior Analyst
Market Intelligence and Consulting Institute (MIC)
Institute for Information Industry

allencheng@micmail.iii.org.tw | 2016.10.13

Definition of Digital Economy-Related Industry in Taiwan

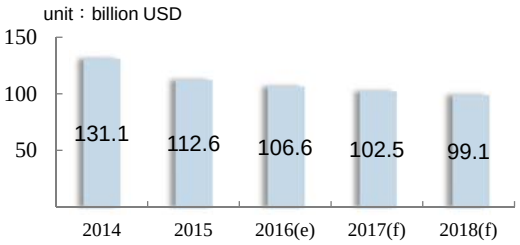


Source: Office of Science and Technology, JUN 2016

1

Manufacturing of computer and digital equipment

Product Value, 2014-2018



Major Industrial Activities

- Fabless IC Design, PC, ODM, EMS, fabless IC Design

Notable Enterprises

- ACER, ASUS, Quanta, Foxconn

Industrial Trend

- IC design develop solutions for various smart applications such as connected cars
- ODMs/EMSs collaborate with startups in early stage R&D including IoT and VR/AR

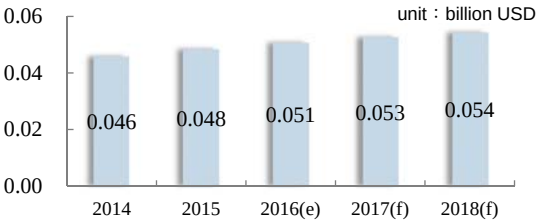
Key Regulation/Policy

- **Current: R&D**
  - **Developing strategic components** including semiconductor, LED, and passive components
- **Future: Testbeds**
  - Smart Machine Development Plan
  - **Asia Silicon Valley Plan**
  - Tariffs on products

2

IT - Service

Product Value, 2014-2018



Major Industrial Activities

- System Integration, customization as major contributors
- **Cybersecurity as featured Industry**
- Developing cloud services

Notable Enterprises

- ACER, SYSTEX, MiTAC, SYSCOM, Wistron
- Trendmicro, D-link

Industrial Trend

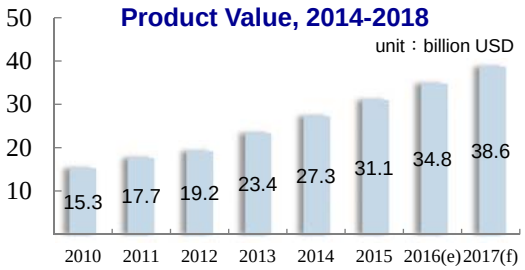
- Developing data analytic and IoT-oriented services with hardware supply chain
  - Smart factory solutions
  - Service robots

Key Regulation/Policy

- **Current**
  - Cloud Computing Development Program
  - **Personal Information Protection Act**
  - Company Act
- **Future**
  - **Improving data flow** (open data)
  - **Light touch regulation** to new business types (tax, categorization, employments)

3

E - Commerce



Industrial Trend

- Cross-border deployments (mainly between Taiwan and Southeast Asia)
- Increase in payment options
- Increasing Entrepreneurship

Major Industrial Activities

- Highly Localization
- Niche services (e.g. fresh goods, female goods, creativity products)
- Open to foreign brands

Notable Enterprises

- B2B2C：Pchome, Yahoo!
- B2C：7-net, PChome24h
- C2C：Ruten, Yahoo!bid,

Key Regulation/Policy

- **Current:**
  - Regulation Amendment plan in digital world
  - Electric Payments Regulation Passed
- **Future:**
  - **Cross-border Taxation**
  - **Regulatory Sandbox**

4

Conclusion

Policy and Regulation are expected to have more:

Support for Innovation

- Adaptive policy-making
- Testing ground
  - Regulatory Sandbox
  - Physical Testbeds
- Free-Flow
  - Custom-duties/Taxations
  - Open Data
  - Open Access

Impact Mitigation

- Consumer Protection
  - Privacy
  - Fair-trade
  - Transparency
- Labor Protection

5

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2nd U.S.-Taiwan Digital Economy Forum

Panel Discussion
"21st Century Standards for Digital Trade and Privacy

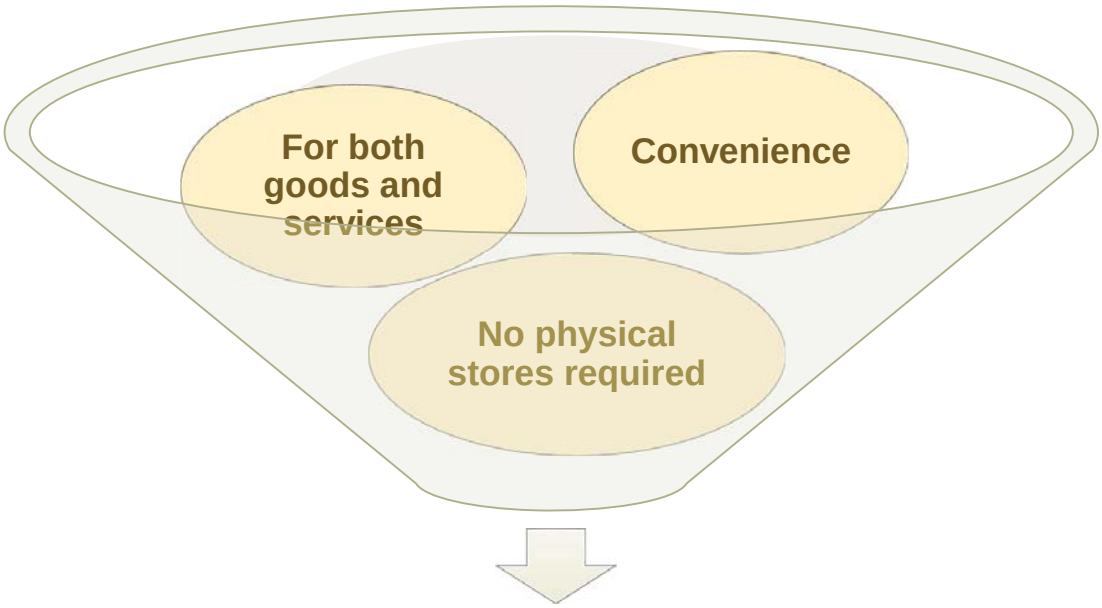
Howard Song
Bureau of Foreign Trade, Ministry of Economic Affairs
Oct 13, 2016

經濟部
Ministry of Economic Affairs, R.O.C.

CONTENTS

A. The importance of digital trade and e-commerce on Taiwan's economy
B. Some feedback from the industry
C. Next steps

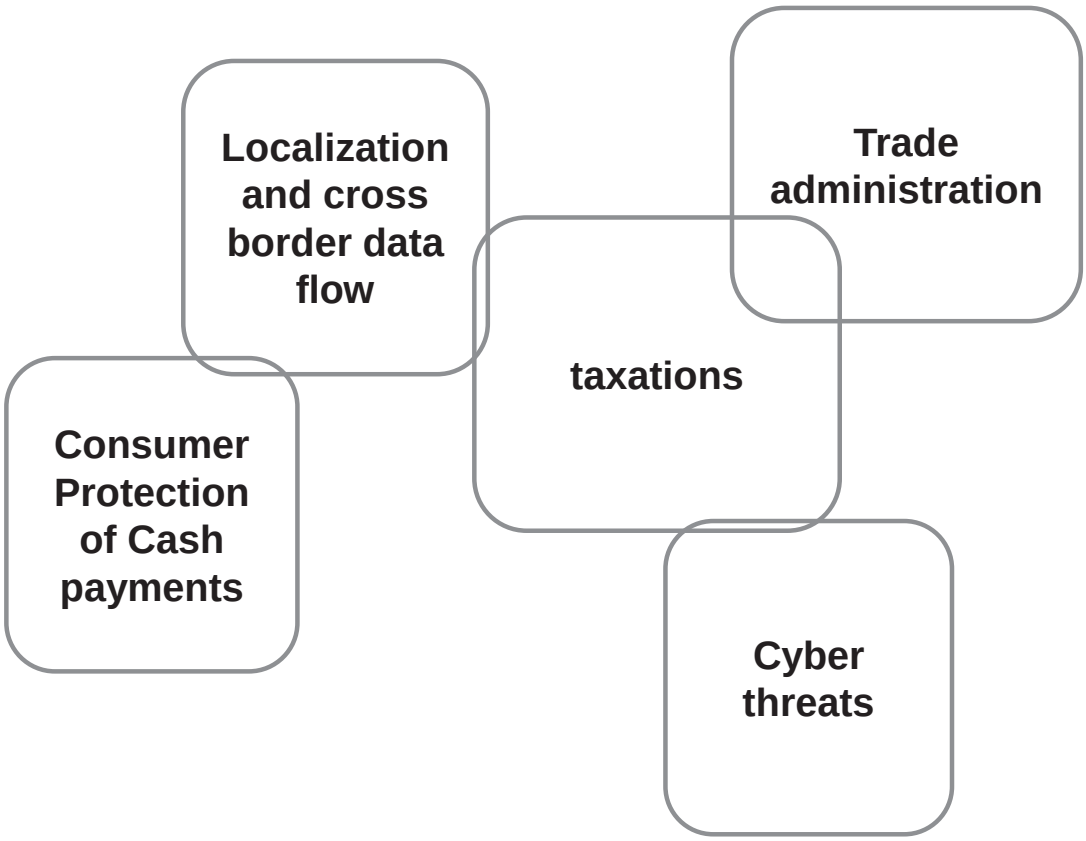
A. The importance of digital trade and e-commerce on Taiwan's economy



Ideal for SMEs

3

B. Some feedback from the industry



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C. Next steps

Domestic	International
• Coordination in the cabinet level • Ad hoc working group • Industry Survey of barriers for digital trade	• The U.S. proposal “Next Step for Advancing Work on Digital Trade in 2017” under the APEC framework • A bilateral dialogue mechanism

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Thank you.

FOR MORE INFORMATION :
HTTP://WWW.TRADE.GOV.TW
HTTP://WWW.MOEA.GOV.TW

2nd U.S.-Taiwan Digital Economy Forum

"ecommerce in Taiwan : Now and Next"

Michael Hung
Chief Marketing Officer, funP Innovation Group
Oct 13, 2016

Taiwan is big in ecommerce

- In 2015, total retail market value is US$ 150 billions
- total ecommerce market value is US$ 20 billions
- ecommerce is 13% of total retail sales (Worldwide ranking #10).
- Taiwan ecommerce total sales amount is more than total Southeast Asia market.

What's Next in digital trade and e-commerce

1. Data is the king
   - Who owns the data ?
     - Search engines / web service providers Google
     - Social media facebook twitter
     - e-Commerce sites amazon
   - 1+1+1 > 3
   - Digital advertising is :
     - Major revenue source of digital platforms
     - Essential driver of ecommerce revenue
2. Information Technologies is the key
   - Big Data analysis
   - Artificial Intelligence
   - Cloud computing
   - Cyber security

Next steps of Taiwan ecommerce players

- Expand to South East Asia market
  - e-Commerce technologies and experiences
    - Products
    - Platforms
    - Service
  - Digital marketing platforms and experts

    facebook Google
- Our strength
  - Talents
  - Technologies
  - Similar culture
  - Similar online behaviors
  - Same area, same time zone
- Taiwan is the hub of US and SEA market

Thank you

Data Flows, Privacy and Digital Trade

The importance of Taiwan's participation in the APEC Cross-Border Privacy Rules System

Krysten Jenci
Director, Office of Digital Services Industries
International Trade Administration
U.S. Department of Commerce

INTERNATIONAL TRADE ADMINISTRATION

10/14/2016

Data Flows and the Digital Economy

- According to a 2016 report by McKinsey Global Institute, data flows:
  - Led to a 10% increase in world GDP ($2.8 Trillion)
  - Could boost GDP by up to 50% in some countries
  - Enable SMEs to leverage digital platforms to become "micro-multinationals"

10/14/2016

Enabling Data Flows: The U.S. Approach

- Building trust is essential to the digital economy's growth
- Obama Administration Privacy Blueprint (2012)
  - Consumer Privacy Bill of Rights
  - Fostering Multistakeholder Processes to Develop Enforceable Codes of Conduct
  - Improving Global Interoperability
    - Examples: EU-U.S. Privacy Shield and APEC Cross Border Privacy Rules

CBPRs

- APEC Cross Border Privacy Rules (CBPR) system
  - Implements the APEC Privacy Framework
  - Developed through a multi-stakeholder process in the APEC Data Privacy Subgroup (DPS) over six year period
  - In 2011 Honolulu Declaration, APEC Leaders committed to CBPR system implementation
- What is the CBPR system?
  - CBPRs are a set of voluntary rules developed by an organization based upon the APEC Privacy Principles (see APEC Privacy Framework)
  - The organization then commits to apply these rules to its activities involving transfers of personal information across borders
  - See www.cbprs.org

APEC CBPRs - Implementation Status

Participating countries

Participating Accountability Agents (AAs)

TRUSTe

JIPDEC

10/14/2016

5

Benefits of CBPRs to Taiwan's economy

- Facilitates trade and increases competitiveness of domestic market while creating credibility in privacy protection
- Facilitates cross-border enforcement cooperation to improve accountability and offer recourse for consumers
- Utilizes front-line private sector Accountability Agent extends the reach of government enforcement while augmenting limited government resources
- Extends benefits for importing and exporting of goods and services in an increasingly digital economy

10/14/2016

6

Benefits of CBPRs to Taiwan's businesses

- Provides streamlined legal compliance through establishment of a global privacy regime based on CBPR compliance that also brings you into compliance with EU Binding Corporate Rules regime
- Facilitates cross-border transfers, especially important with recent revisions to Japanese and Canadian law
- Demonstrates accountability to consumers and regulators, increasing trust and confidence
- Benefits SMEs by establishing a common set of criteria across APEC region for compliance and builds consumer trust

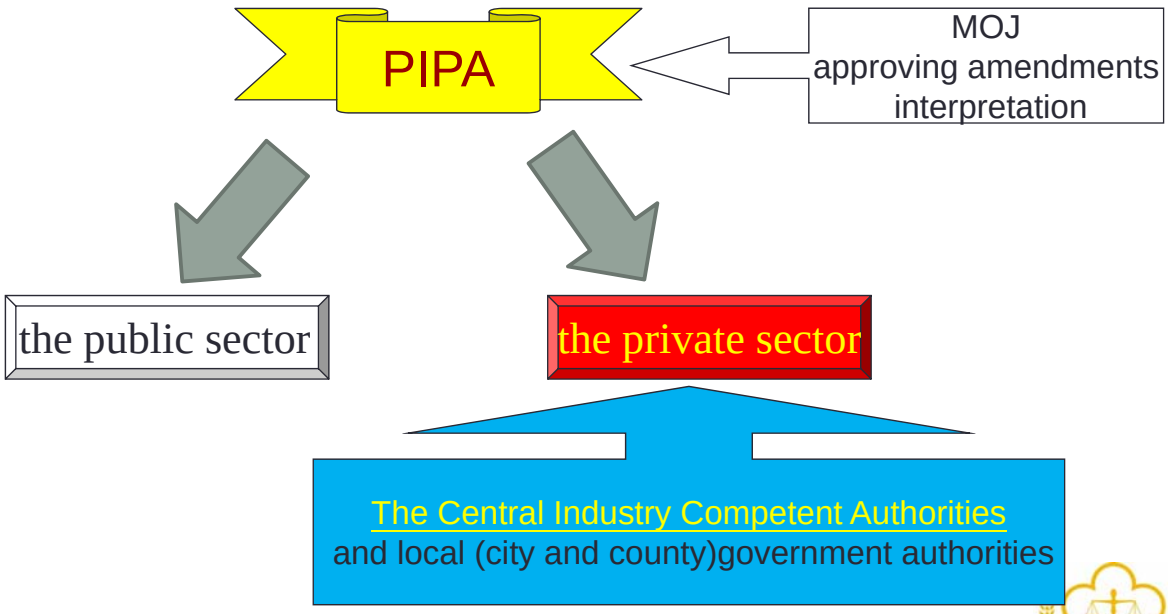
The Issue of Cross-Border data Flows in Taiwan's Personal Information Protection Act (PIPA)

Mr. Mou Hsin Huang, Deputy Director,
Department of Planning,
Ministry of Justice(MOJ)

2016. 10. 13

Ministry of Justice

The supervision framework of PIPA



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The Administrative Supervision

The Central Industry Competent Authorities

- Limit or prohibit the private sector to do cross-border data transmission if some specific conditions occur (Article 21).
- Designate the private sector for setting up the plan of security measures for the personal information file or the disposal measures for the personal information after termination of business (Article 27 Ⅱ).
- Set up the rules of the fore-mentioned plan and processing methods (Article 27 Ⅲ).

Ministry of Justice

The Administrative Supervision

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Ministry of Justice

International Transfers Issue

- The Central Industry Competent Authority may prohibit the private sector from making an international transmission of personal Information if:
  - it will prejudice any material national interest;
  - it is prohibited or restricted under an international treaty or agreement;
  - the country to which the personal Information is to be transmitted does not have sound legal protection of personal Information , thereby affecting the rights or interest of the personal Information subject(s); or
  - the purpose of transmitting personal Information is to evade restrictions prescribed under the PIPA.
- MOJ has no authority to this matter. So long as no prohibition is/has been issued by the Competent Authority, IT is permissible
- In 2011, National Communications Commission made a public announcement to bar telecom enterprises to transmit their users' PI to mainland China
- Out of PIPA, transfers of personal data abroad require prior approval from a supervisory authority (i.e. Regulations Governing Internal Operating Systems and Procedures for the Outsourcing of Financial Institution Operation)

Ministry of Justice

The Administrative Supervision

The Central Industry Competent Authorities

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Many Central Industry Competent Authorities Have Enacted Generated Rules

- Regulations Governing Personal Information File Security Maintenance Plan and Processing Method for the Human Resources Recruitment Industry **Ministry of Labor**
- Regulations Governing Personal Information File Security Maintenance Plan and Processing Method for the Non-government Agencies designated by Financial Supervisory Commission **Financial Supervisory Commission**
- Regulations Governing Multi-Level Sales' Plan of Security Measures for Personal Information files & Disposal Measures for the Personal Information After Termination of Business **Fair Trade Commission**
- Regulations Governing Internet Retail and Internet Retail Services Platform Industries' Plan of Security Measures for Personal Information files & Disposal Measures for the Personal Information After Termination of Business

Ministry of Economic Affairs (MOEA)

Ministry of Justice

Ministry of Economic Affairs (MOEA) Taiwan Personal Information Protection and Administration System (TPIPAS)

dp.mark
資料隱私保護標章

Ministry of Justice

THANK YOU FOR LISTENING

Ministry of Justice

The Latest Legal Development and Trend of Market Response to Cross Border Data Flows

Science & Technology Law Institute, III

Jung-Chin KUO 郭戎晉

Section Manager

ronkuo@iii.org.tw

OCT. 13, 2016

Challenges of Cross Border Data Flows

- Rapid changes of technology and business model make Cross Border Data Flows normal
  - Technology applications: Cloud Computing, Big Data…
  - Business model: e-Commerce, Social Economy, Sharing Economy…
- Cross Border Data Flows must take account of the protection of information and the reasonable use of information
  - Most people focus on data protection, so the reasonable use of information is easily ignored
  - Overreaction

Challenges of Cross Border Data Flows

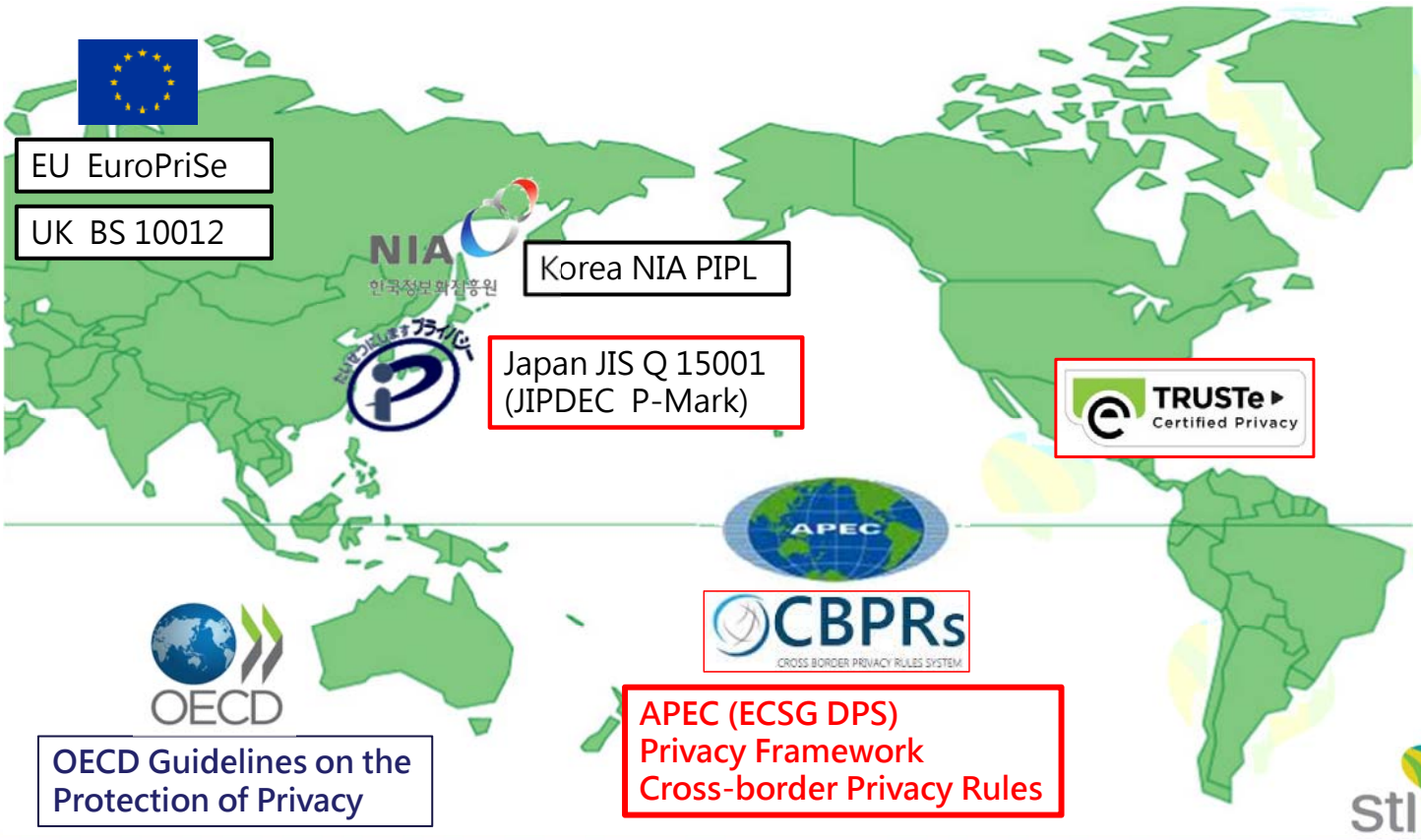
- Differences among International Personal Data Protection Legislations :
  - 1. Regulation on both of public and private sectors
  - 2. Mainly regulating public sector, while private sector resorting to self-regulatory mechanism
  - 3. No specific legislation on the protection of personal data
- Differences of the practice of Cross Border Data Flows among countries:
  - 1. The principle of openness
  - 2. Adequate level of protection(Directive 95/46/EC; 2016 General Data Protection Regulation, GDPR)

Efforts to Develop Privacy Laws Have Been Underway

- Data Protection Laws in Asia

	Data Protection Law	Date	Amendment
Japan	Act on the Protection of Personal Information	2003(Announced) 2005(Enforced)	2015
Korea	Personal Information Protection Act	2011	2015
Philippines	Data Privacy Act of 2012	2012	
Singapore	Personal Data Protection Act	2012(Announced) 2013(Enforced)	
Taiwan	Computer-Processed Personal Data Protection Act	1995	
	Persona Information Protection Act	2010(Announced) 2012(Enforced)	2015

From Domestic to International Management Concepts of Personal Data Protection



To Join CBPRs, Taiwan Has to Confront CPEA and AA

Cross Border Privacy Rules System (CBPRs)

Limited to APEC Member Economies

Cross-border Privacy Enforcement Authority

Participate in the APEC Cross-border Privacy Enforcement Authority (CPEA)

Express intention to participate in the APEC CBPR system

Confirmation that economy has :

1. **At least one CPEA**
2. **Use at least one named APEC CBPR system recognized Accountability Agent (AA)**
3. **Details of relevant domestic laws and administrative measures**

APEC (ECSG) Chair + APEC ECSG DPS Chair + APEC CBPR system (JOP) Chair

Importance of Public/Private Sectors to Reach a Consensus

- Various Ministries and City/County Governments Serve as the Competent Supervisory/Enforcement Authorities：
  - Necessities of Consultation
  - Lessons from other Economies' development experiences
- Data Protection Management Mechanism is Gradually Noticed by Taiwan Enterprises：
  - TPIPAS(dp.mark) / ISO 29100 / BS 10012 / others
  - Mechanism is now mostly adopted by listed companies, so small and medium enterprises (SMEs) need more improvements
  - Strengthening the private sectors' knowledge of CBPRs is also a target

THANK YOU
FOR YOUR ATTENTION

INTERNET OF THINGS AND SMART CITIES

Sokwoo Rhee
National Institute of Standards and Technology (NIST)
US Department of Commerce

Public Sector IoT: Smart Cities and Communities

Smart City: Use smart technologies such as IoT and CPS to improve the quality of life in cities and communities

- Many smart community efforts are one-off projects with heavy emphasis on customization and inadequate consideration for future upgradability and extensibility
- Lack of clear measurability of success impedes broader adoption of the solutions
- As a result, many Smart Cities/Communities deployments are isolated and do not enjoy the economy of scale.

The White House Smart Cities Initiative

Launched September 14th, 2015 as part of the Administration's overall commitment to **target federal resources to meet local needs and support community-led solutions**

Goals	Partners
• Invest over **$160 million** in federal research • Additional **$80 million** announced Sept 2016 • Leverage dozens of new technology collaborations to help local communities tackle key challenges	• NIST (Global City Teams Challenge), NSF (Foundational Research) • DHS, DOT, DOE, EDA, EPA, Census

https://www.whitehouse.gov/the-press-office/2015/09/14/fact-sheet-administration-announces-new-smart-cities-initiative-help

National Institute of Standards and Technology (NIST) Global City Teams Challenge (GCTC)

NIST GLOBAL CITY TEAMS CHALLENGE usignite

Establish and demonstrate replicable, scalable and sustainable models for incubation and deployment of interoperable, standard-based IoT solutions and demonstrate their *measurable* benefits in Smart Communities/Cities

Timeline	Stats
• 20-month process (2 Phases) • 1st Phase by June 2016 • 2nd Phase by June 2017	• **90+** Teams • **120+** Cities/Local Governments • **300+** Companies, Universities, Non-profits • **2000** attendees

www.globalcityteams.org

Department of Transportation (DoT)

Smart Cities Challenge

Funding of up to $50 million was awarded to one mid-sized city that puts forward bold, data-driven ideas to improve lives by making transportation safer, easier and more reliable.

Winner: Columbus, OH

Challenge Goals	Timeline	City Criteria
• Optimized mobility • Safety • Sustainability • Support economic vitality	• Feb: 76 applications received • March: 7 Finalists were announced • June: Winner was announced	• Population of 200k-850k • Dense urban population • Established public transit system • Conducive environment

https://www.transportation.gov/smartcity

National Science Foundation (NSF)

Smart and Connected Community Funding Program

Accelerate fundamental understanding and stimulate basic research on:

- Effectively integrating data sources, networked computing systems, and sensors with people, decision-making, and physical infrastructure and systems to enable more livable, workable, and sustainable communities regardless of place or scale.
- Research across many application areas, including intelligent transportation, energy efficiency, building automation, health and wellness, environmental sustainability, education and learning, and public safety and emergency response.

https://www.nsf.gov/cise/scc/

GCTC 2016 Phase 2 Goals

- **Super-Clusters**
  - Existing and future Action Clusters form multi-city, multi-stakeholder "SuperClusters" organized around the deployment common project objectives and shared solutions in the sectors including Transportation, Public Safety, Emergency Preparedness, Disaster Recovery, Energy+Environment and/or General Smart City.
- **Measurement of True Impacts**
  - Each team creates at least one Key Performance Indicator (KPI) of the *tangible and direct* impacts to the local governments and the residents.
- GCTC expects to feature the results and process of successful SuperClusters throughout the year, and recognize them at the 2017 Expo.

GCTC 2016 SuperCluster Kickoff Conference: Oct 25-26, Washington DC

- **To initiate the formation of the SuperClusters, NIST will host a 2-day workshop on Oct 25-26, 2016, at Grand Hyatt Hotel Washington DC**
  - Invited Speakers from the White House, Department of Transportation, Department of Homeland Security, National Science Foundation, International Trade Administration with the focus on their activities to support smart cities initiatives.
  - Invited Speakers from Cities and Communities, Companies, Universities and Non-profits leading various SuperClusters including Portland, OR, Atlanta, GA, Newport News, VA, Columbus, OH, Bellevue, WA, Baltimore, MD and Kansas City (KS & MO) and cluster partners AT&T, CH2M, IBM, Intel, Qualcomm, Verizon.
  - Representatives from Italy, Netherlands, Finland, Korea, Japan, India
  - Opportunities for every attendee to introduce their smart city and IoT solutions and be part of the SuperClusters in Transportation, Public Safety, Emergency Preparedness, Disaster Recovery, Energy/Water, Healthcare/Environment, Dashboard and Public WiFi.
- The registration is free, open to anyone interested in Smart Cities and IoT. (https://www.nist.gov/news-events/events/2016/10/global-city-team-challenge-gctc-2016-supercluster-kickoff)
- GCTC expects to feature the results and process of successful SuperClusters and their members throughout the year, and recognize them at the next GCTC Expo in Summer 2017.

For More Information

- Contact
  - Sokwoo Rhee (sokwoo.rhee@nist.gov)
- Challenge web site: Meet the action clusters
  - www.globalcityteams.org
- GCTC 2016 Expo (Austin, TX, USA, June 13-14, 2016)
  - http://www.gctcexpo.org/
- Social Media
  - Twitter #globalcityteams
  - Twitter #gctcexpo2016

2nd U.S.-Taiwan Digital Economy Forum
George Washington University – State Room

IoT and Smart Cities：
Structuring an Open Eco-system

Jang-Hwa Leu
Deputy Director General
IDB, Ministry of Economic Affairs
October 13, 2016

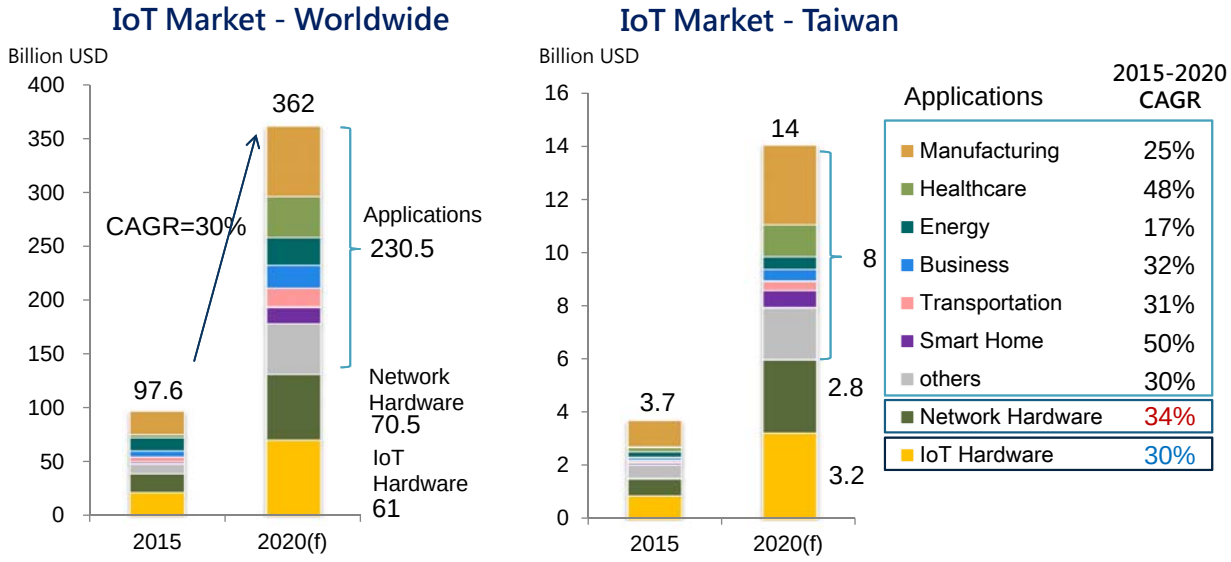
INDUSTRIAL DEVELOPMENT BUREAU, MINISTRY OF ECONOMIC AFFAIRS
經 濟 部 工 業 局

Contents

INDUSTRIAL DEVELOPMENT BUREAU, MINISTRY OF ECONOMIC AFFAIRS
經 濟 部 工 業 局

Trend of IoT Industry

- In 2020, worldwide IoT-Related Market Size will exceed 360 Billion USD. 6 Major sectors will be Manufacturing, Energy, Business, Transportation, Home, and Medicare.
- IoT-Related Market Size in Taiwan is 3.7 Billion USD in 2015, and is expected to reach 14 Billion USD in 2020.



Source：Gartner, IDC, Harbor research, ABI, MIC, Mar 2016

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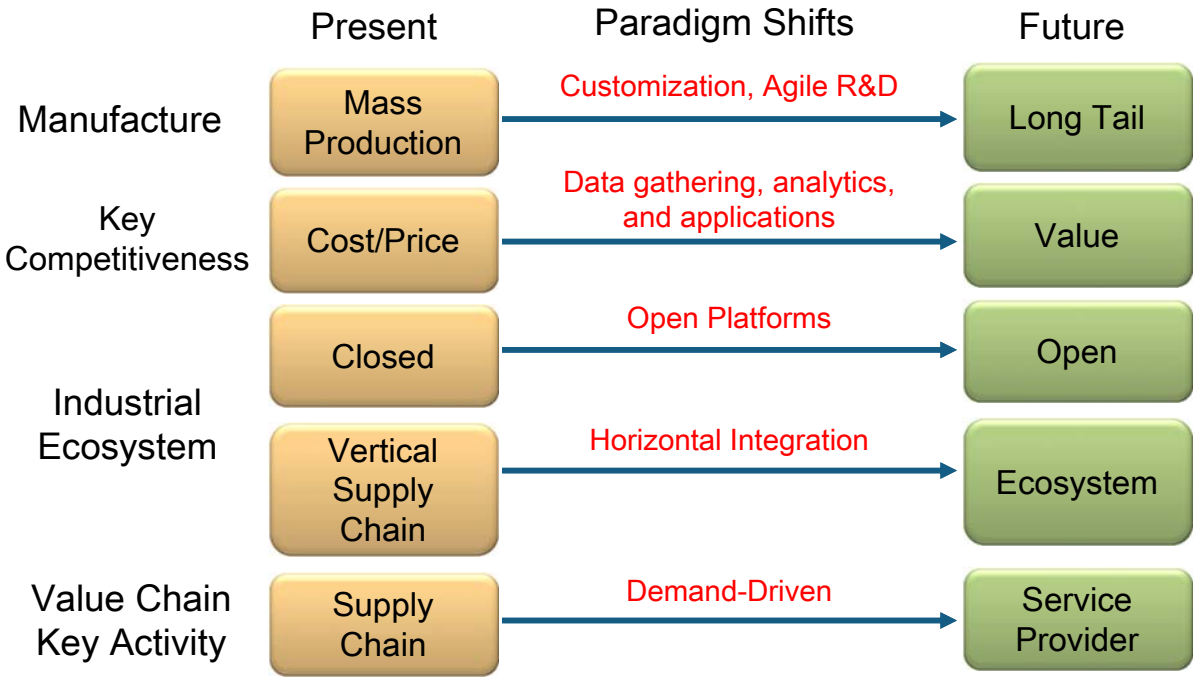
經 濟 部 工 業 局

IoT Provokes Industrial Paradigm Shifts



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II、Current Initiatives and Challenges

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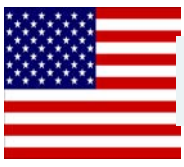
IoT Strategy in Major Countries

Policy：
- Making Developing IoT-related Technology Prior missions.
- Promoting IoT Development through Public/Private Partnerships and Creating Testbeds

Focusing Technologies：
- Sensors, Cloud Platforms, Smart Solutions



Smart Cities Initiative

- **City as testbeds:** Providing solutions through public/private partnerships
- **Focusing Areas：** Cyber/physic system, Smart services, Infrastructures, Healthcare

K-ICT

- **Anchors as Leaders:** Innovation Partnership between large/small Enterprises
- **Focusing Areas：** Smart Home, Smart Grid, Healthcare, Connected Cars, Manufacturing, Tourism

"Japan is back"

- **Cross-Agency Integration:** Advanced Research Center formed by multiple departments
- **Focusing Areas：** Transportation, Healthcare, Manufacturing, Tourism

2016-2020 Five-Year Plan, IoT Specific Plan

- **Public/Private Partnership:** Crafting IoT Platforms
- **Focusing Areas：**
Agriculture, Smart City, Safety, Transportation, Healthcare, Community, Environment, Education

INDUSTRIAL DEVELOPMENT BUREAU, MINISTRY OF ECONOMIC AFFAIRS
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Current IoT Industrial Activities and Challenges

IoT Layer	Current Activities
Application	**Major Areas** • Manufacturing, Energy, Healthcare **Notable Companies** • 64 companies including Advantech, Delta, China Telecom, generating 20Billion USD per year
Network	**Major Areas** • Gateways, Telematics, Small Cells **Notable Companies** • 37 companies including Mediatek, Wistron, Sercomm, generating 8 Billion USD per year
Perception	**Major Areas** • Self-Sensing, Integrated Sensors, Micro Sensors. **Notable Companies** • 80 companies including Quanta, Asus, Pixart, generating 9 Billion USD per year

Source: DOIT, APR 2016

INDUSTRIAL DEVELOPMENT BUREAU, MINISTRY OF ECONOMIC AFFAIRS
經 濟 部 工 業 局

Current IoT Industrial Activities and Challenges

Industrial Challenges

Few World-Class System Integrators

Companies rarely provide innovated, differentiated, and localized solutions.

Missing Platform to improve interoperability

- Fragmented IoT Standards hinder the entire industry from scaling

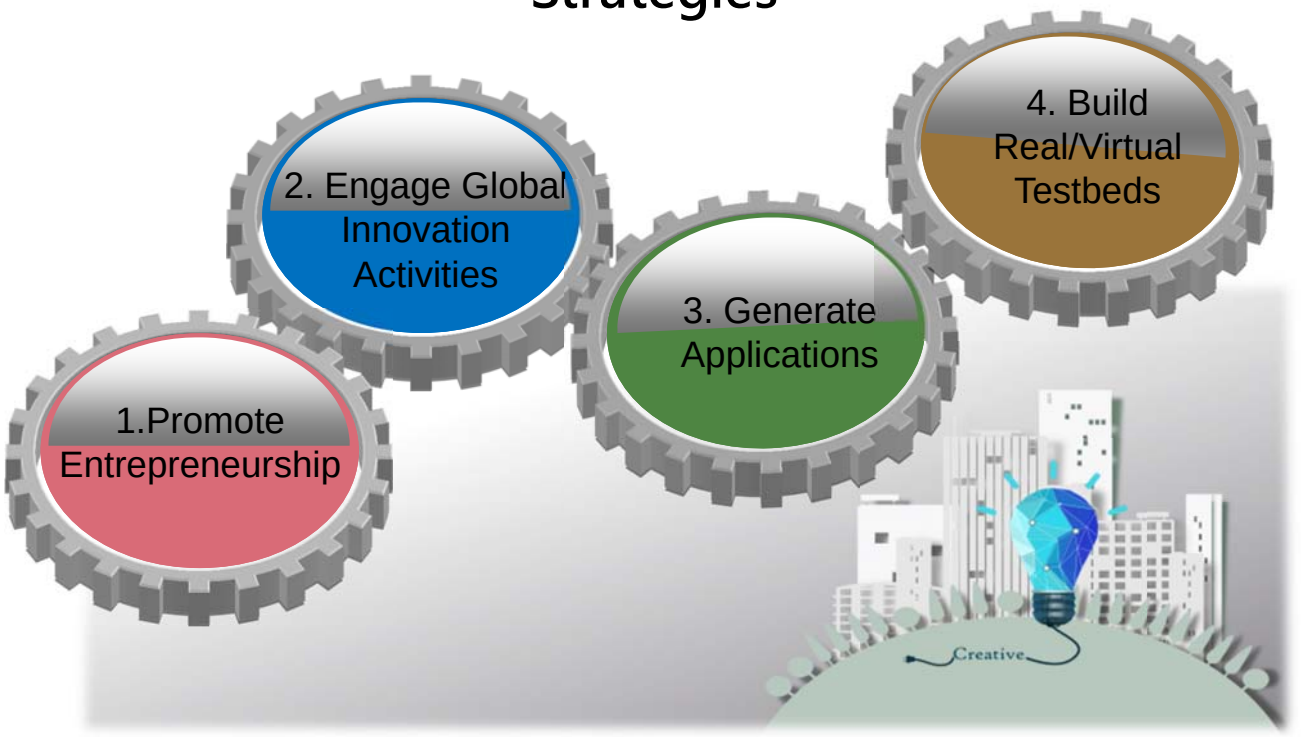
Core Technology

- R&D in sensors fall behind.
- Concentrate in hardware manufacturing
- Unable to integrate hardware/software.

Source: DOIT, APR 2016

"Asian Silicon Valley" Plan to Transform Economic Structure

Strategies



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"Asian Silicon Valley" Plan to Transform Economic Structure

Scale	Goal
2016 – 2023	3.8 % to 5%
Implementation Period	IoT Global Market Share 2015-2025
357 million	100 Companies
Budget	Startups or R&D Centers

- Internet infrastructure
- Mobile broadband services
- E-commerce
- Smart applications
- Test beds
- Industry-university collaboration
- Digital talent and regulatory adjustment

Source: National Development Council, AUG 2016

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III、IoT and Smart Cities in Taiwan

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「Asia · Silicon Valley」:

Promoting Cooperative IoT Innovation between Taiwan and the World

Police Cloud

Distributing patrols according to big data analysis, including images from Surveillance cam.

Co-operation between Taiwan Hardware, and software from IBM and Microsoft

Disaster Relief

Chile, Aug 2010: 33 trapped miners during mining accident were rescued by NASA's "Fénix capsules."

IP CAM equipped on "Fénix capsules" were made by VIVOTEK in Taiwan

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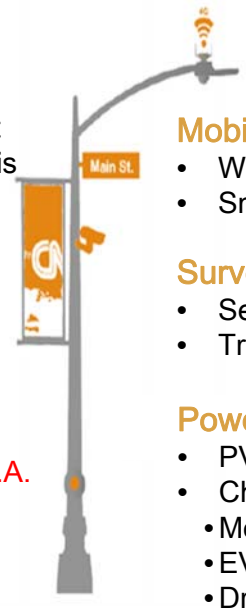
「Asia · Silicon Valley」:
Promoting Cooperative IoT Innovation between Taiwan and the World

Light poles as IoT Infrastructure

Network is the backbone of smart cities. Well-spread light poles are the most convenient infrastructure which network can be built upon.

Smart Light Pole by LEOTEK



Smart Lighting
- Light Control
- Failure Report
- Usage Analysis

Digital Signage
- Weather/Traffic
- Business Ads

Pole
- Made by U.S.A.

Mobile Network
- Wi-Fi
- Small Cells

Surveillance
- Security Condition
- Traffic Condition

Power-Hub
- PV Panel
- Charging for:
  - Mobile Phone
  - EV, E-Bike
  - Drone

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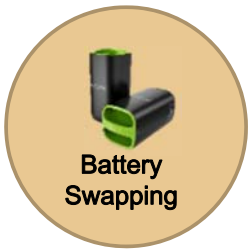

gogoro : Urban EV Mobility

Deputy Minister Shen and DDG Jang-Hwa Leu, Berlin(2016.9)

Combining EV-Bike and battery swap/distribution system, Gogoro provides clean and swift urban mobility

- 2016: Served as Private-Rental Bike in Berlin
- 2017:System to be introduced to Amsterdam, ….etc.

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Smart City: City as IoT Innovation Testbed

- In Taiwan, public sector is learning to recognize open innovation and the growth of the ecosystem as an achievement of a city.
- Public Sector creates best testbed for innovation through co-work, co-operation, and co-sharing

Co-work

- Certain infrastructures can be built by private sector.
- Private sector generates revenue through providing additional services based on infrastructures they built. (Not by charging for infrastructure)

Co-operation

- Public sector and private sector work as partners
- For example, Government lighting cost saved by LED smart lighting can be shared by both government and companies who build the lighting system.

Co-sharing

- Data generated from infrastructures can be valuable to companies who build the infrastructure.
- Certain data can be released as open data in order to promote governance and innovations.

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IV、Case Study

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Three Connections

- Industrial Development through three “connections”

Connecting the Future:

Executing foresighted R&D plans according to industrial trend and Taiwan’s advantages.

Connecting the World:

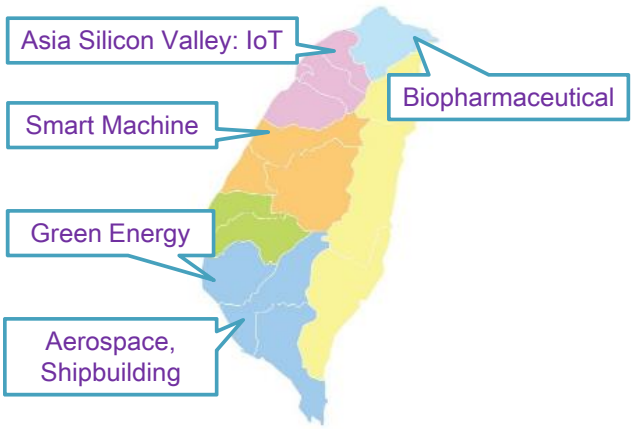
Connecting to different tech-advanced countries according to strategic demands.

Connecting to Local Stakeholders:

Promoting cross-sector innovation and cross-regional integration. Hence, leveraging Taiwan local market as industrial testbeds and initial market before entering global market.

- Three Actions to practice three connections:
  - Integrating local Industries
  - Supporting industries with domestic demand
  - Entering global markets

- 5+2 Industrial R&D Plans



Source: TIER, MIC, JUN 2016

International Collaboration

- Building Alliance between Taiwan industries and global stakeholders
- Aiming for global IoT market through strategic collaborations

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International Collaboration

- **Oct 21th, 2015:** An MOU of "IoT Industry Development Center" was signed between Ministry of Economic Affairs and Microsoft which focuses on:
  - **Intelligent:** Developing end-to-end IoT solutions
  - **Integration:** Integrating back-end and front-end into "semi-turnkey solutions" through middleware and services
  - **Internationalization:** Exploring global market through Microsoft global platforms

MOU signed between Taiwan Government and Microsoft. From the left:

- General Manager Shao **(Microsoft Taiwan)**
- Director May **(AIT)**
- General Manager Philips **(Microsoft Enterprise Cloud Group)**
- Premier Mao **(Executive Yuan, Taiwan)**
- Deputy Minister Shen **(MOEA, Taiwan)**
- VP Neil **(Microsoft Enterprise Cloud Group)**

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International Collaboration

Sep 29th 2016: In 「2016 Taipei 5G/IoT Summit」, an MOU was signed between Taiwan Association of Information and Communication Standards (TAICS) and US Telecommunications Industry Association (TIA) which focuses on:

- Strengthen Communications on developing International Communication Standards
- Introducing Taiwan Enterprises to Advanced Wireless Research Initiative(AWRI), the platform of advanced wireless research.

- According AIT Section Chief Cook:
  - "Bringing key stakeholders worldwide to join the collective knowledge will result advances in the next step industry development."
  - The letter of intents will reap major benefits for Taiwan and US as Taiwan strikes toward 2020 goal to play a leader role in 5G commercialization.

MOU signed between TAICS and TIA. From the left:

- Chairman Tzeng **(TAICS)**
- CEO Belcher **(TIA)**
- Deputy Director General Lo **(Department of Industrial Technology,Taiwan)**
- Chief Cook **(Commercial Section, AIT)**

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International Collaboration

Sep 1th 2016: President Tsai visited Himax, which is a Taiwanese company located in Tainan, specializing in Display Driver IC. She experienced the latest technology of 3D hologram-like projection.

President Tsai expressed great appreciation on many world-leading technologies from Himax, especially Himax's persistent effort on developing augmented reality (AR) and virtual reality (VR), which has been over 15 years.

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International Collaboration

- **Mar 25th 2016:** Opening Ceremony of "Geek Cave," the Industrial Tech Support Center in TAF which focuses on developing VR/AR, Gaming and digital visual effects
- "Geek Cave" invited distinguished stakeholders including Autodesk, HTC, NVIDIA, Unity, Acer, Asus, Gigabyte, LiveHouse.in, MSI, and Samsung

From the left:
- Manager Chen **(Autodesk)**
- Vice General Manager Bao **(HTC)**
- CEO Wu **(Institute of Information Industry)**
- Director General Wu **(Industry Development Bureau)**
- Taiwan General Manager Chu **(nVidia Taiwan)**
- Director Chang **(Unity Taiwan)**

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International Collaboration

Activities in "Geek Cave," the Industrial Tech Support Center in TAF

R&D Areas	Game		VR/AR	Visual Effect
Technologies	Game Engine	Platforms	3D Modeling	4K Visual Effect
Industries	Game	Business, Education, others	Animation	Film

nVIDIA Gameworks VR workshop

Demonstrating Capabilities through Events

Frontstage：Enhanced-Experience

AR Broadcasting

Ultra Dense Network

AI Translation

Facial Recognition

Backstage：Pressure-test

2017 WCIT TAIWAN

- AR/VR Broadcasting
- AI Translation
- IoT Applications

2018 International Flora Exposition

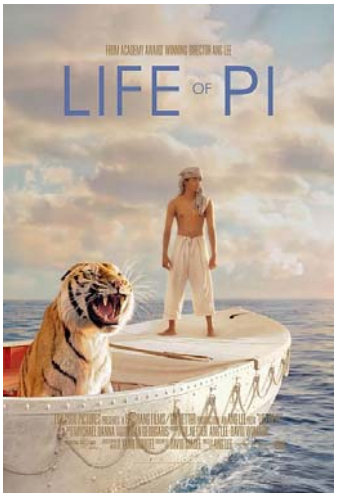
- AR/VR Broadcasting
- Agriculture mMTC
- Drones

Computex 2020

- AR/VR Broadcasting
  Facial Recognition
- IoT Applications

V、Conclusion

We are looking forward to further collaboration between US and Taiwan on digital economy!



How to make Connected Home Smarter

Jeffery Tu
Solution Architect

CONNECTED HOME

3 Primary Sectors

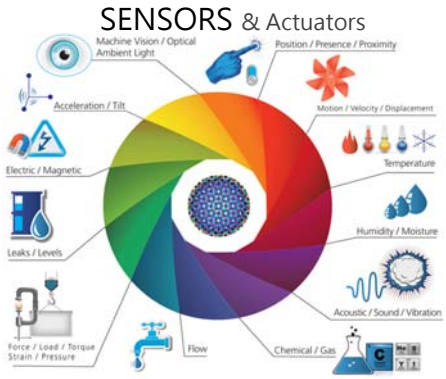
- Security
- Central Appliances
- Home Hubs

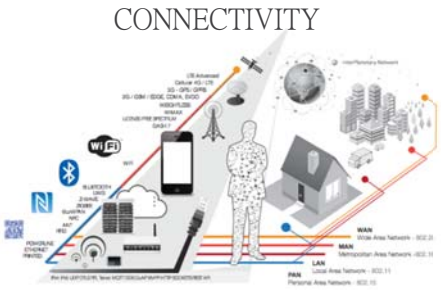
2

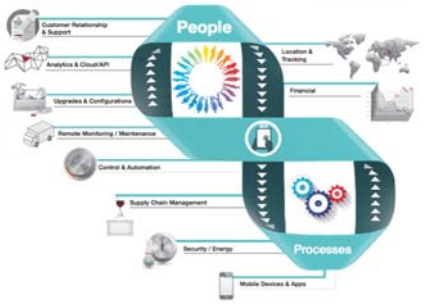
NOT JUST SENSORS/ROBOTS

Smart Home and IoT are driven by a combination of

1. **Sensors & Actuators**
2. **Connectivity**
3. **People & Processes**
4. **Systems**







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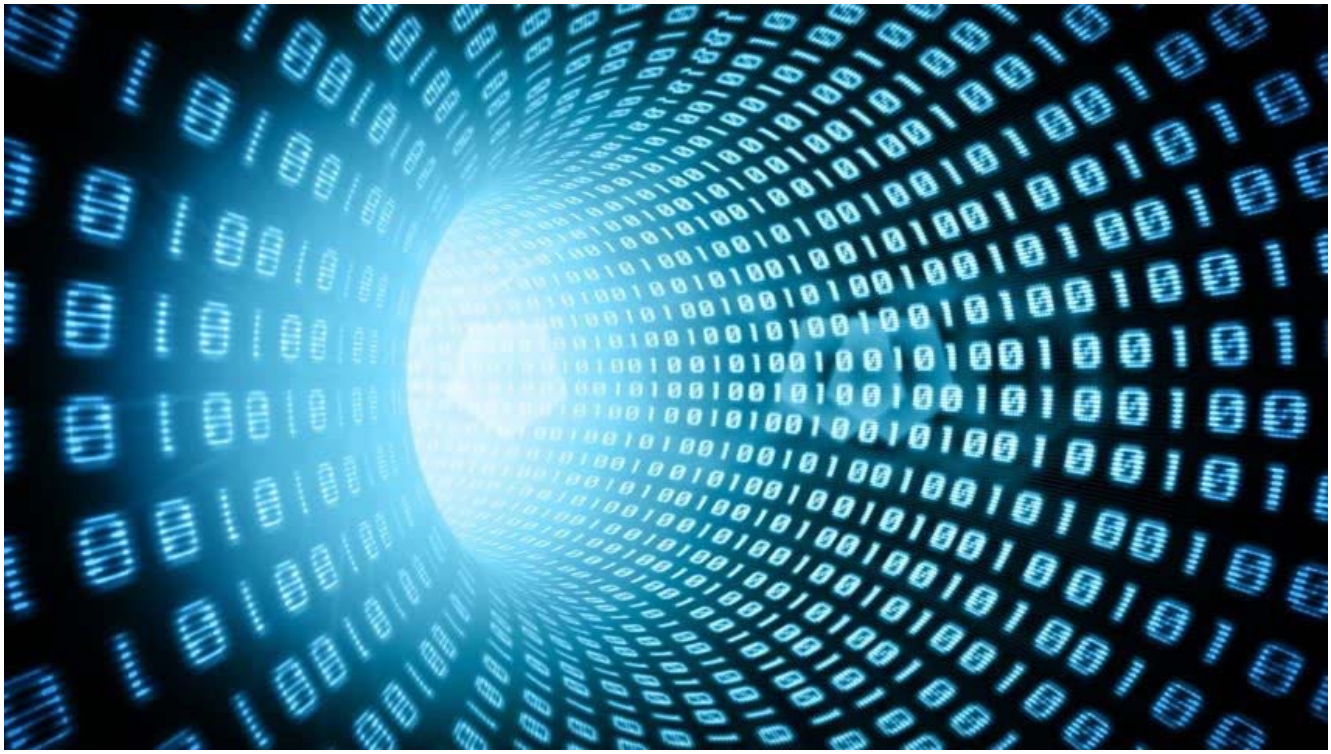
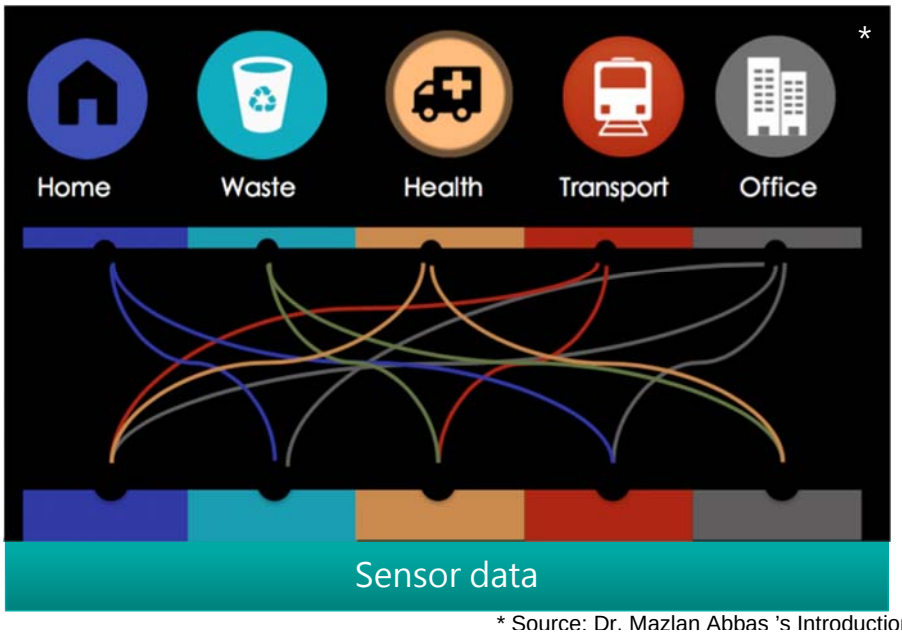
[Source: http://postscapes.com/what-exactly-is-the-internet-of-things-



IOTS COLLECT LOTS OF DATA



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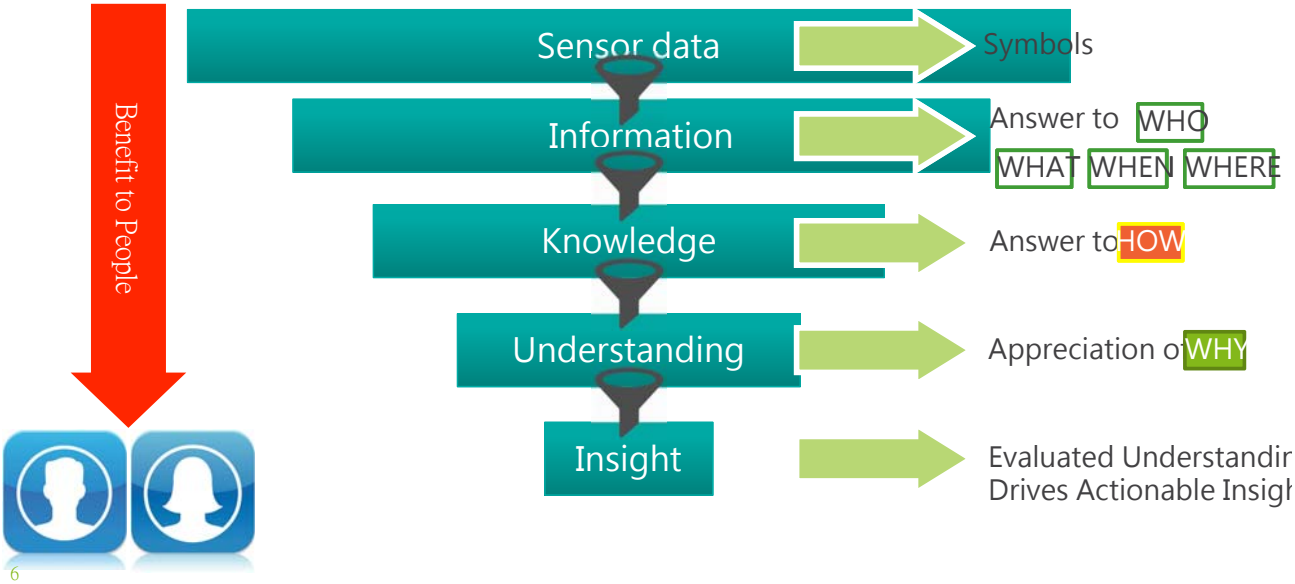
* Source: Dr. Mazlan Abbas 's Introduction to IoT & Smart City

VALUE IS CREATED BY MAKING SENSE OF DATA



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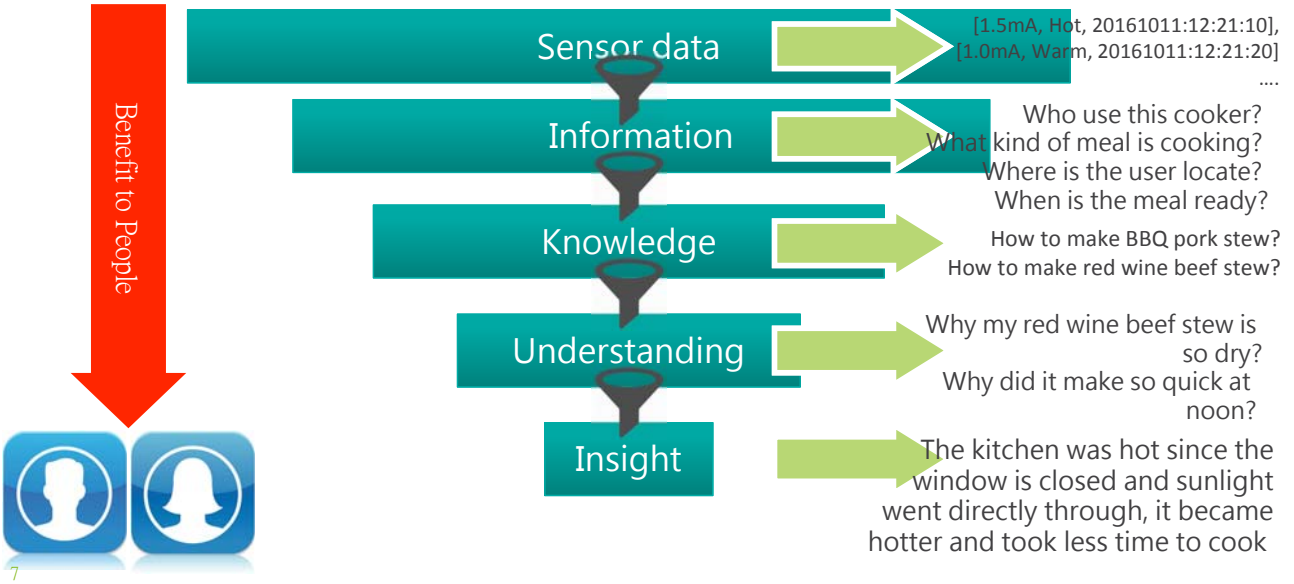
ACTION IS DRIVEN BY INSIGHT

Use smart slow cooker as example



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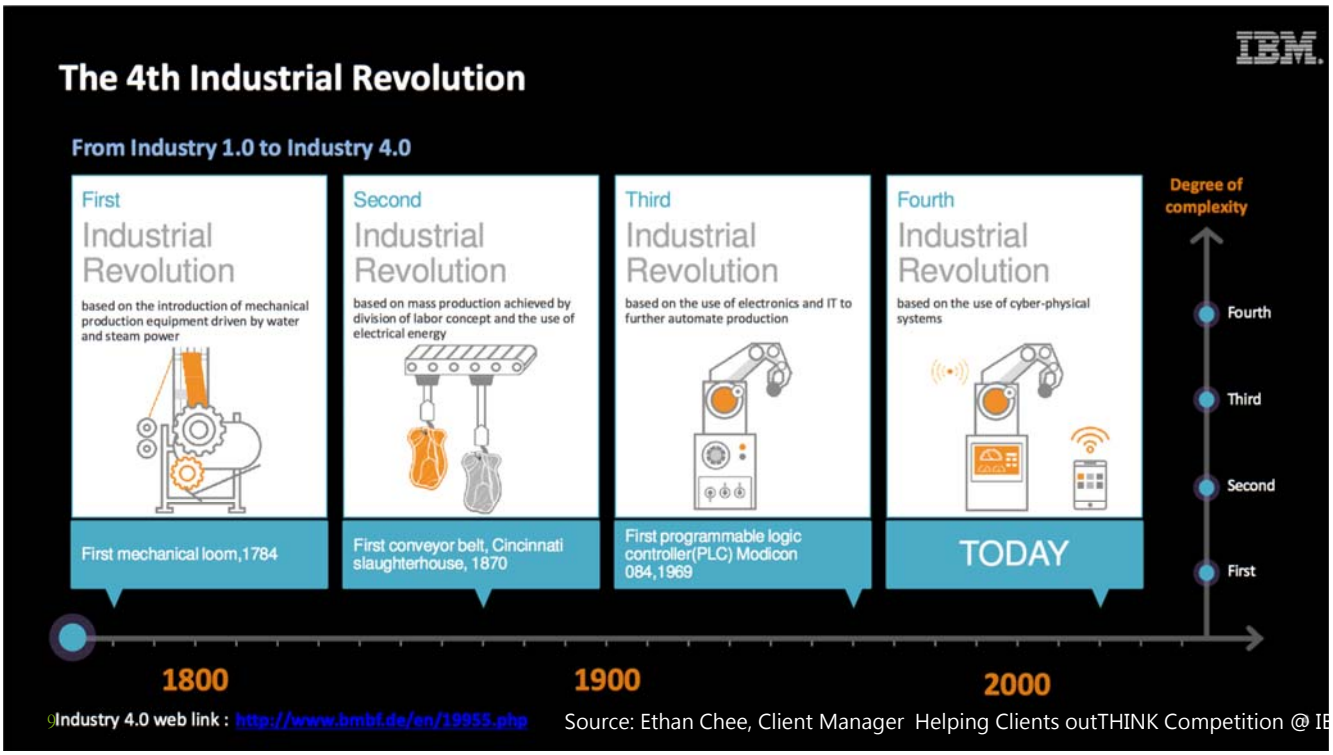
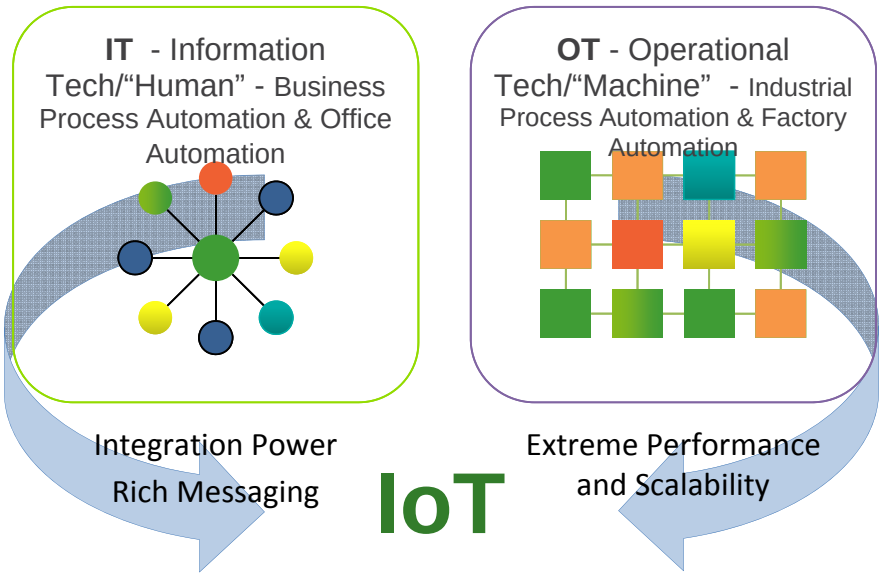


BRIDGING THE IT/OT DIVIDE



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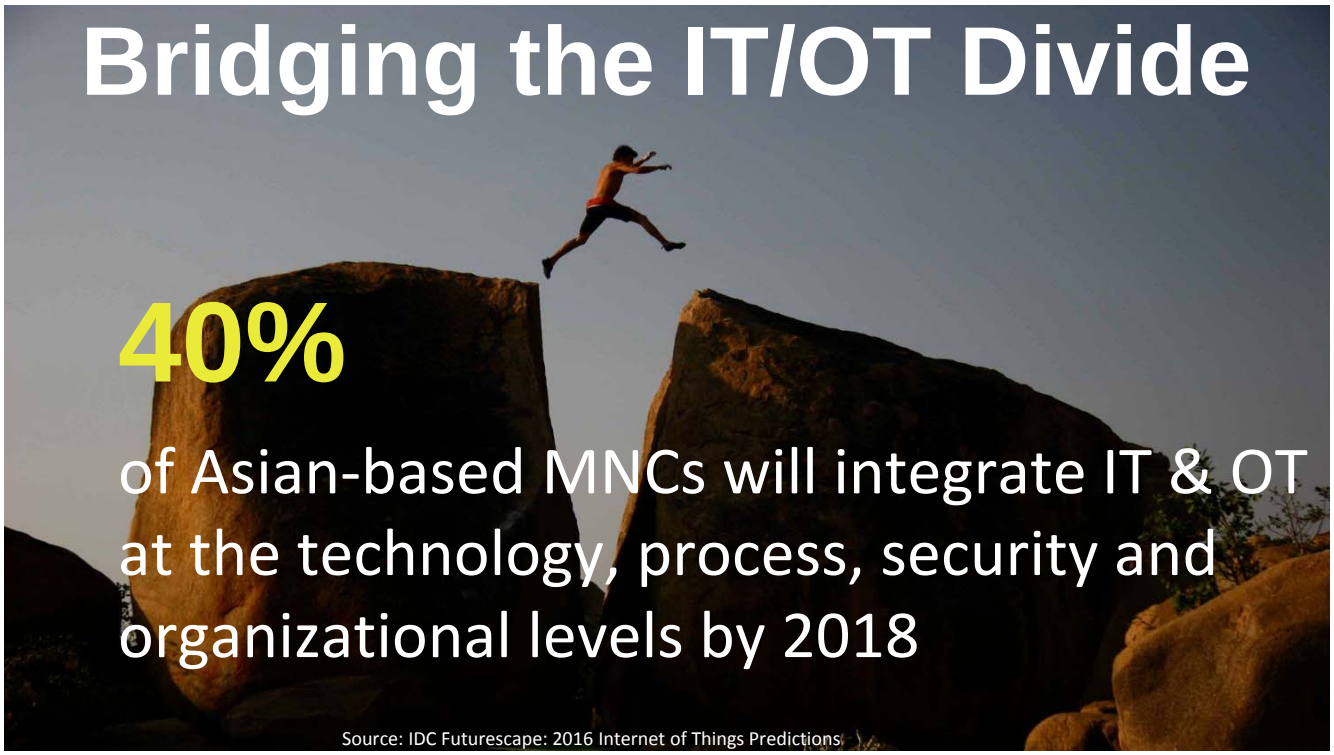
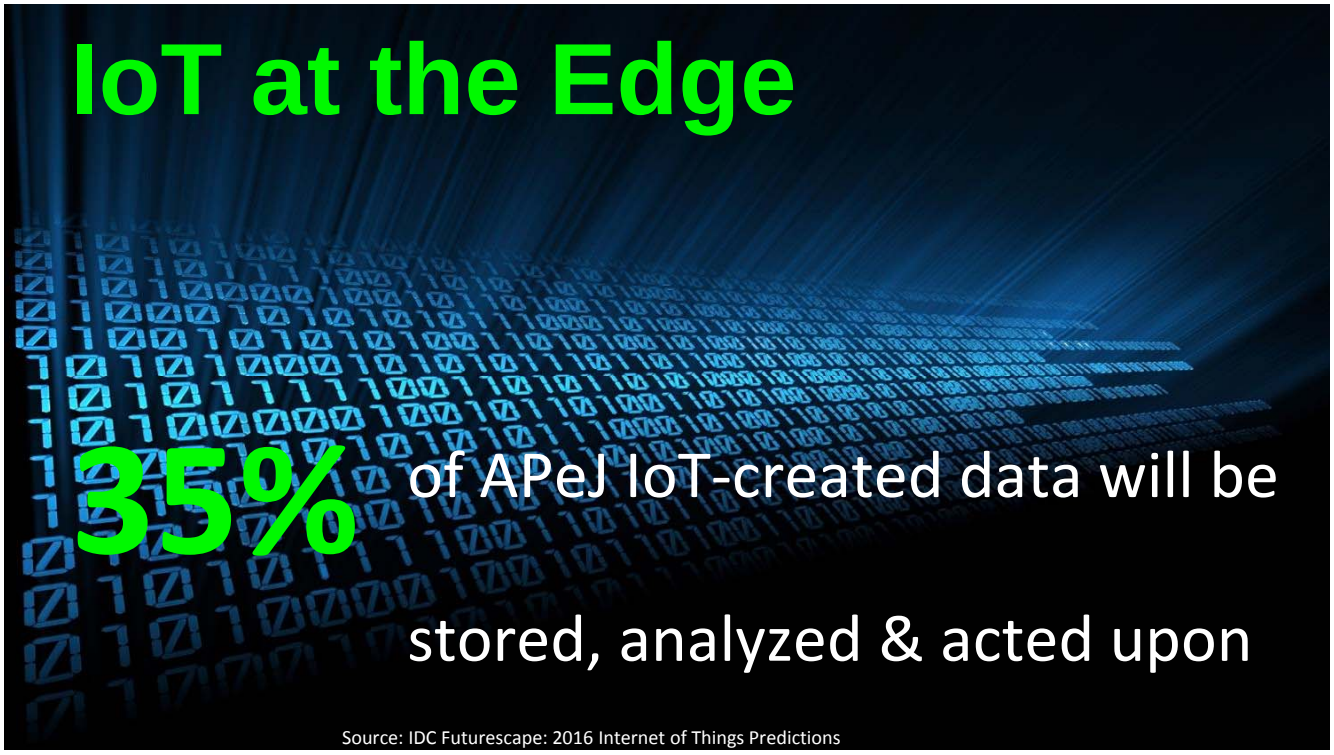
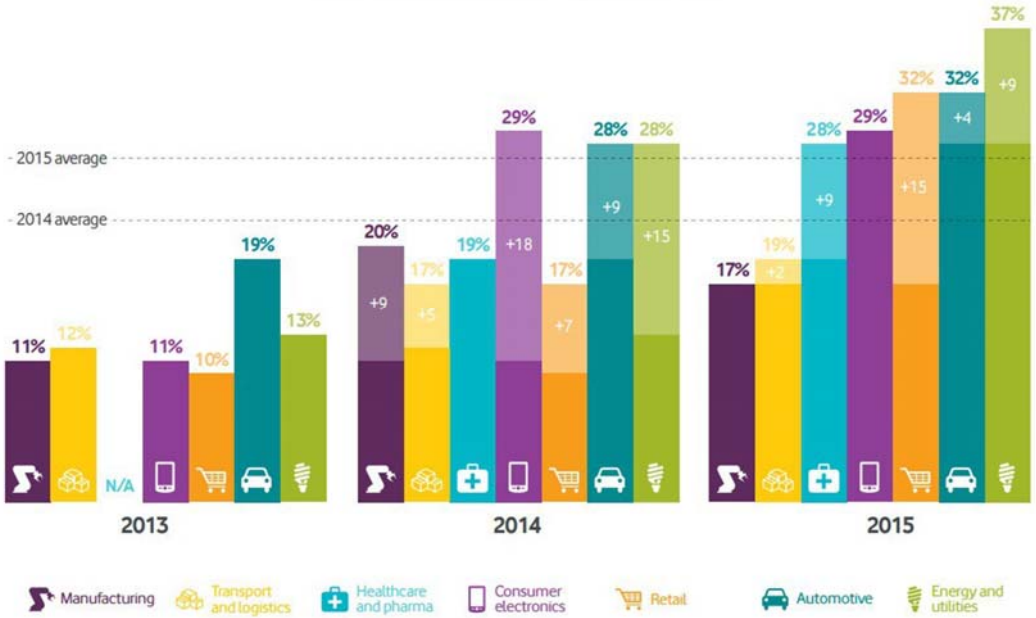

Bridging the IT/OT Divide
40%
of Asian-based MNCs will integrate IT & OT at the technology, process, security and organizational levels by 2018
Source: IDC Futurescape: 2016 Internet of Things Predictions


IoT at the Edge
35%
of APeJ IoT-created data will be stored, analyzed & acted upon
Source: IDC Futurescape: 2016 Internet of Things Predictions

ADOPTION OF M2M BY INDUSTRY, 2013-2015



[Source: World Economic Forum, Is this the future of the Internet of Things?, November 27, 2015]

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EXAMPLE: WHO IS AT HOME

- **Who is home while we're working outside?**
- **Pets like Dogs and Cats. 70-80 million dogs and 74-96 million cats are owned in the United States. Approximately 37-47% of all households in the United States have a dog, and 30-37% have a cat. [Source: APPA, https://goo.gl/p2IMbm]**
- **Seniors like our parents. Over 40 million adults age 65 and over will be living alone in US, Canada, Europe [Source: U.S. Department of Health and Human Services: Administration for Community Living (ACL)]**

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PETS @HOME





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WELLNESS CARE + SMART HOME

- Consider aging parents are still living isolated at their home
- Concern about their safety and communication
- GrandPad brings Hardware, Software (Apps), 4G LTE, Support to seniors but also Insurance, and services. No Prior Computer Experience Necessary!

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Our Vision

BYOC

Enabling New Computation & Communic

acer BYOC

Internet of Things cannot function without insight.

Introducing: “Internet of Beings”

沒有智慧的物聯網，無法真正利益人群

因此有了「智聯網」的誕生

acer BYOC

IoT and IoB for Human Beings

萬物智聯，人人為本

Human Beings

Insight 洞見

Internet of Beings

Intelligence 智能

Internet of Things

Data & Information 資訊

acer | BYOC build your own cloud

Thank You

INTERNATIONAL TRADE ADMINISTRATION

U.S.-Taiwan Digital Economy Forum

FinTech

October 13, 2016
George Washington University

Office of Finance & Insurance

- Office of Finance & Insurance covers FinTech, reinsurance, venture capital, private equity, banking and other subsectors of financial services globally for the Administration
- Developed FinTech Top Market Report and initiated FinTech programs within the US government – ***ITA FinTech*** Report ***is cited as the most comprehensive US government Report*** on the sector
- Follow-on 2017 FinTech Report with deeper analysis on other FinTech subsectors; FinTech venture capital firms, companies and expand foreign countries' coverage
- Provide guidance to U.S. FinTechs to expand globally. Catalyze investment and trade missions to introduce US FinTechs to global partners around the world

FinTech Overview

AVERAGE FINTECH INVESTMENTS

USD 12MN ➡ **USD 50MN**

Average investments increased by $38mm from 2014 to 2015, with 68% of deal activity at the Seed or Series A stage.[2]

LOAN GROWTH

Loan levels on the two largest platforms, Lending Club and Prosper, grew from USD $26mm to $1.7bn from 2009 to 2014.

POTENTIAL REVENUES

Financial services revenues at risk of being displaced by FinTech.[3]

[2] Barrett, John and Alex McCracken. "Investment Trends in FinTech". Silicon Valley Bank. (January 2015); [3] "The FinTech revolution". The Economist. 9 May 2015 ; [4] Beardsley, Eric and Ryan Nash. "Future of Finance - Part 1". The Rise of the Shadow Bank". Goldman Sachs. (March 2015).

Global and US FinTech Funding Overview

Figure 1: 5 Year Global FinTech Investments (2010-2014), $billions

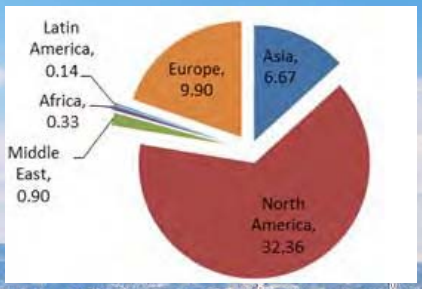


Figure 2: Overall VC and FinTech funding in Southeast Asia, 2015

Source: Dymon Asia Capital, Tech in Asia, DMP, PwC, Dealstreet Asia

- 2017 Asia Pacific will have nearly 3 billion mobile phone users out of a total of 5.1 billion across the globe providing significant FinTech opportunities for US companies! (eMarketer)

- IDC Financial Insights Asia Pacific reported innovation would be the focus for Asia Pacific banks with many of them allocating up to 25 per cent of their IT budgets on emerging technologies designed to improve operations and services.

U.S. FinTech Policies Updates

Recent U.S Government public outreach to FinTech industry for policy formulation includes:

- ***Aug 14, 2015*** – Treasury issues RFI for Public Input on Expanding Access through Online Marketplace lending and subsequently issues White Paper on May 2016
- **August 15, 2015** – Treasury's Office of the Comptroller of Currency Initiative to develop ability to identify and understand FinTech trends. OCC issues White Paper on "Supporting Responsible Innovation in the Federal Banking System" a year later
- ***Oct 26, 2016*** – FTC hosts FinTech Forum on Crowdfunding and Peer to Peer Payments
- ***Nov 14, 2016-*** SEC FinTech Forum on "FinTech & Innovation in the Financial Services Industry" open to both foreign and domestic public audience
- **June 16, 2016** – White House's "Future of Finance is Now" Summit for leaders in the industry and government policy makers

Regulatory Environment

Agencies

Office of the Comptroller of the Currency, U.S. Department of the Treasury	The OCC charters, regulates, and supervises banks and federal savings associations
FDIC	FDIC maintains stability and public confidence in the nation's financial system
cfpb	CFPB is responsible for the American consumer protection in the financial sector
United States Federal Reserve System	The Federal Reserve is responsible for regulating banks, maintaining the stability of the financial system
U.S. Securities and Exchange Commission	The SEC is responsible for enforcing securities laws, proposing securities rules, and regulating securities industry

RULE BASED

US FinTech regulations involve many different federal agencies in addition to possible state regulators

Regulation is still evolving:

- Treasury has suggested a regulatory oversight board comprised of federal and representative of state bank regulators
- Current Congressional House Bill draft aims to Set up "Sandbox" for FinTech Innovation

ITA FinTech Report - Overview

Figure 11: Leading Global FinTech Innovators

Payments
Adyen (Amsterdam)
FangDD (Shenzhen)
Klarna (Stockholm)
Qufenqui (Beijing)
iZettle (London)
TransferWise (London)
Square (San Francisco)
Stripe (San Francisco

Lending
Funding Circle (San Francisco)
Avant (Chicago)
Credit Karma (San Francisco)
Kabbage (Atlanta)
Lending Club (San Francisco)
Lufax (Shanghai)
Ondeck (New York)
Prosper (San Francisco)
Affirm (San Francisco)
Sofi (San Francisco)
Prospa (Sydney)

Wealth Management
Wealthfront (Palo Alto)
Robinhood (Palo Alto)
Motif Investing (San Francisco)
Personal Capital (Redwood City)
Betterment (New York)
LearnVest (New York)
EToro (London)
Motifinvest (San Francisco)

Digital Currencies
Coinbase (San Francisco)

Crowd Funding
Circleup (San Francisco)
OurCrowd (Jerusalem)

Retail Banking
Kreditech (Hamburg)
Atom (Durham, UK)

Insurance/Health
ZhongAn (Shanghai)
Oscar (New York)
Collective Health (San Mateo)
Policybazaar (Gurgaon, India)
Knip (Zurich)

Other
Paypal (Palo Alto)
IEX (New York)
Secure Key Technologies (Toronto)
Xero (Wellington, NZ)

Source: FinTechinnovators.com

- ***US FinTechs*** can be divided into many sub-segments including Payments, Lending, Wealth Management, Digital Currencies, CrowdFunding, Retail Banking, Insurance/Health

Figure 10: Global Financial Centers – Areas of Competitiveness

Rank	Business Environment	Financial Sector Development	Infrastructure	Human Capital	Reputational & General
1	London	London	London	London	London
2	New York (2)	New York (2)	New York (2)	New York (2)	New York (2)
3	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong
4	Singapore	Singapore	Singapore	Singapore	Singapore
5	Tokyo	Tokyo	Tokyo	Tokyo	Tokyo
6	Seoul	Boston (12)	Seoul	San Francisco (9)	Sydney
7	Zurich	Chicago (11)	Zurich	Zurich	Chicago (11)
8	Luxembourg	Washington DC (10)	Luxembourg	Chicago (11)	Toronto
9	Toronto	San Francisco (9)	Toronto	Washington DC (10)	San Francisco (9)
10	Chicago (11)	Zurich	Chicago (11)	Boston (12)	Boston (12)
11	Sydney	Seoul	Sydney	Toronto	Zurich
12	Dubai	Sydney	Dubai	Seoul	Vancouver

Source: The Global Financial Centres Index 18, 2015

- Many global financial centers are based on 4 factors: Business Environment, Financial Sector Development, Infrastructure, Human Capital and Reputation

International Finance Centers Index

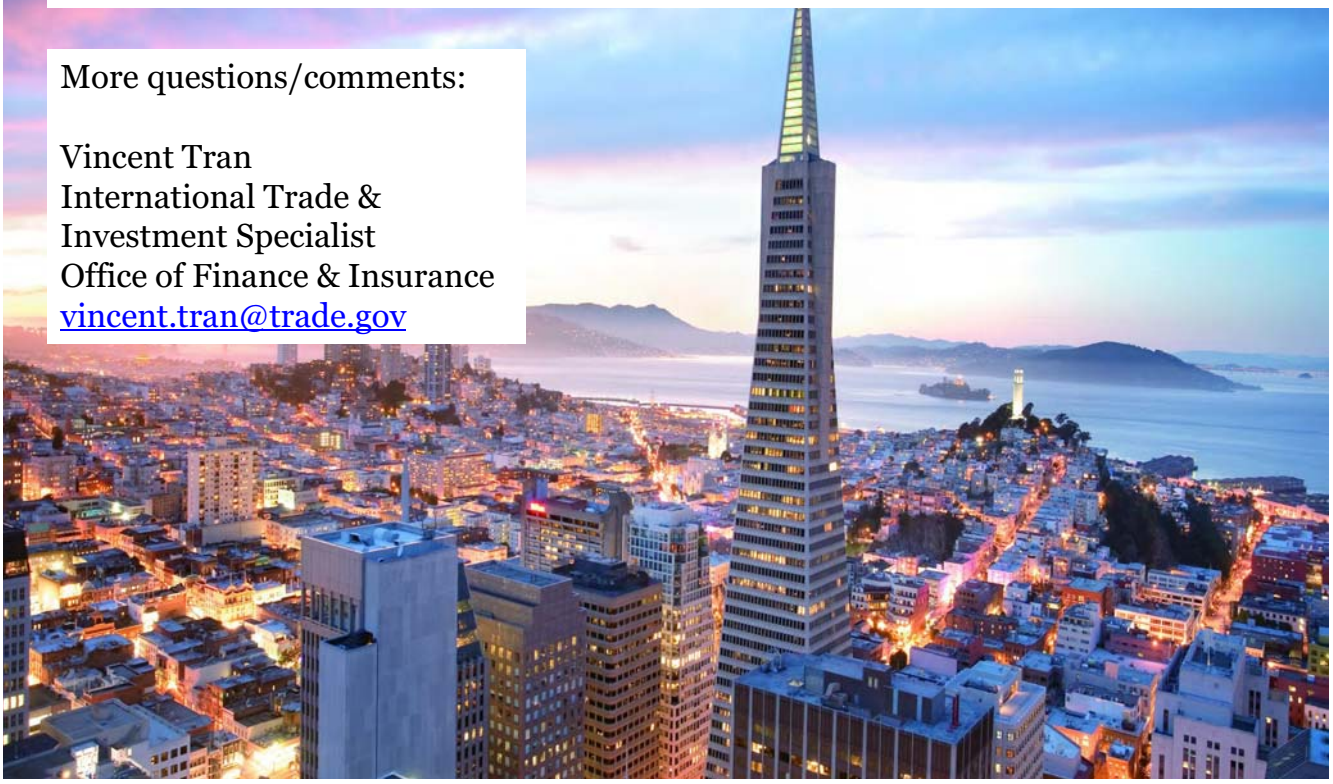
- Different countries have various inherent competitive advantages but proactive government policies, and open environment is crucial to the industry healthy development

	GFCI 18 rank	GFCI 18 rating	GFCI 17 rank	GFCI 17 rating	Change in rank	Change in rating
Hong Kong	3	755	3	758	-	▼ 3
Singapore	4	750	4	754	-	▼ 4
Tokyo	5	725	5	722	-	▲ 3
Seoul	6	724	7	718	▲ 1	▲ 6
Sydney	15	705	21	690	▲ 6	▲ 15
Osaka	20	699	31	668	▲ 11	▲ 31
Shanghai	21	698	16	695	▼ 5	▲ 3
Shenzhen	23	694	22	689	▼ 1	▲ 5
Busan	24	690	24	687	-	▲ 3
Taipei	26	686	25	686	▼ 1	-
Melbourne	27	685	28	677	▲ 1	▲ 8
Beijing	29	676	29	674	-	▲ 2
Dalian	41	660	51	632	▲ 10	▲ 28
Kuala Lumpur	45	656	38	652	▼ 7	▲ 4
Bangkok	48	651	50	633	▲ 2	▲ 18
Manila	55	631	62	611	▲ 7	▲ 20
Mumbai	59	627	53	626	▼ 6	▲ 1
Jakarta	73	610	57	618	▼ 16	▼ 8

	Broad & deep	Relatively broad	Relatively deep	Emerging
	Global Leaders	Global Diversified	Global Specialists	Global Contenders
Global	Amsterdam	Brussels	Beijing	Moscow
	Dublin		Dubai	
	Frankfurt		Luxembourg	
	Hong Kong			
	London			
	New York			
	Paris			
	Seoul			
	Singapore			
	Toronto			
	Zurich			
	Established Transnational	Transnational Diversified	Transnational Specialists	Transnational Contenders
Transnational	Boston	Busan	Abu Dhabi	Edinburgh
	Chicago	Copenhagen	Almaty	Gibraltar
	Geneva	Los Angeles	British Virgin Islands	
	Istanbul	Milan	Casablanca	
	Kuala Lumpur	Munich	Cayman Islands	
	Lisbon	Stockholm	Guernsey	
	Madrid		Jakarta	
	Montreal		Jersey	
	Prague		Shenzhen	
	Shanghai			
	Sydney			
	Tokyo			
	Vancouver			
	Washington DC			
	Established Players	Local Diversified	Local Specialists	Evolving Centres
Local	Budapest	Calgary	Bahamas	Athens
	Melbourne	Glasgow	Bahrain	Dalian
	Mexico City	Oslo	Bangkok	Helsinki
	Osaka	Rome	Bermuda	Liechtenstein
	San Francisco		Cyprus	Monaco
	Sao Paulo		Doha	Reykjavik
	Tel Aviv		Isle of Man	Riyadh
	Vienna		Johannesburg	St Petersburg
	Warsaw		Malta	Tallinn
			Manila	
			Mauritius	
			Mumbai	
			Panama	
			Rio de Janeiro	
			Taipei	

ITA FinTech Report

Download the Full Report: http://trade.gov/topmarkets/financial-tech.asp



More questions/comments:

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Taiwan´s Fintech Developing Programs

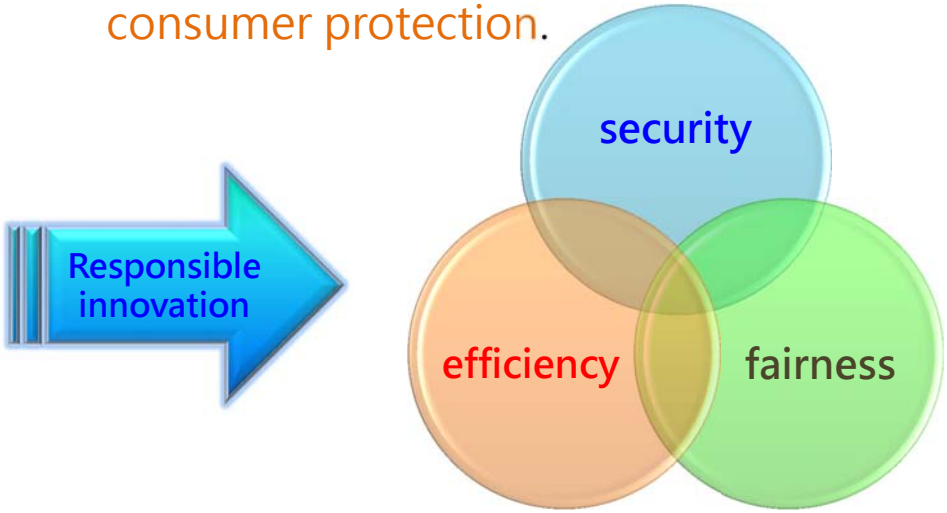
Ms. Fiona SU
Financial Supervisory Commission
Oct. 13, 2016

金融監督管理委員會

Taiwan´s fintech developing programs

Introduction

- The FSC encourages financial companies innovating their services, while requests them striking the balance between innovation , risk control and consumer protection.



Taiwan´s fintech developing programs

Introduction

Founded the Financial Technology Office on September 24th 2015 to facilitate the use of technology

Had Taiwan Financial Services Roundtable Co. to set up ´´Fintech Development Fund´´ in September 2015 , which totaled USD 6.38 million in the first stage and will total USD 32.9 million

Published the Financial Technology Development Policy White Paper in May 2016 to guide future policy promotion

Had financial associations to hold 15 fintech forums in August 2016 to invite experts to discuss and proposed fintech developing programs in September 2016

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Taiwan´s fintech developing programs

Develop Fintech digital financial commercial model

Ten Action Plan

Action Plan 1	• Increasing utilization and innovation of mobile payment
Action Plan 2	• Encouraging cooperation between banks and P2P platform operators to create for win-win situation
Action Plan 3	• Facilitating healthy development of crowdfunding platforms
Action Plan 4	• Encouraging insurance industry to develop innovative products using Big Data applications of Fintech
Action Plan 5	• Establishing a web-based mutual fund sales platform and developing ´´Robo advisor´´ service

Taiwan´s fintech developing programs

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Develop fintech Digital financial commercial model

Ten Action Plan

Action Plan 6	• Cultivating Fintech talent in the financial industry in response to financial technology developments
Action Plan 7	• Creating Digital Environment for Book Entry Activities
Action Plan 8	• Developing Applications of Distributed Ledger Technology
Action Plan 9	• Establishing a Financial Information Sharing and Analysis Center
Action Plan 10	• Establishing an Authentication and Identification Service Center

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Taiwan´s fintech developing programs

1.Increasing utilization and innovation of mobile payment

- Purpose of Action Plan：Promoting development of domestic industries related to mobile payment
- Future promotion methods：

✓ Encouraging financial institutions to expand mobile payment business

✓ Rolling reviews related regulations and increases penetrations of terminal equipment for mobile payment by domestic shops

Taiwan´s fintech developing programs

1.Increasing utilization and innovation of mobile payment

- Achievements to date：

✓ Current status of mobile payment services by financial institutions(As of 6/30, 2016)

- 23 financial institutions had issued **TSM** mobile credit cards
- 1 had issued a **HCE** mobile credit card, etc.
- The total transaction amount was about USD 42.74 million

✓ Current figures on domestic terminal equipment of mobile payment(As of 6/30, 2016)

- over 800,000 contactless credit card readers
- 38,000 contactless bank card readers

金融監督管理委員會

Taiwan´s fintech developing programs

2. Encouraging cooperation between banks and P2P platform operators to create for win-win situation

- Purpose of Action Plan：Developing new sources of financing and providing more financing choices to individuals, SMEs, and micro enterprises

- Future promotion methods：

✓ Inviting **network lending platform operators** and **Bankers Association members** to meetings for communication and encouraging them to work with each other

✓ Propagating **network lending platform operators that work with banks** should comply with requirements for **risk management** and **customer protection**

Taiwan´s fintech developing programs

3. Facilitating healthy development of crowdfunding platforms

- Purpose of Action Plan：Encouraging innovation, providing sources of financing to SMEs, and creating more opportunities for matching on capital and business activities for GISA board firms
- Future promotion methods：

✓ Increasing recommending parties to find premium leads

✓ Continuous advocacy

✓ Regulation review

金融監督管理委員會

Taiwan´s fintech developing programs

3. Facilitating healthy development of crowdfunding platforms

- Achievements to date：

✓ Amended **Regulations Governing the Conduct of Equity Crowdfunding by Securities Firms** and **Regulations Governing the Go Incubation Board for Startup and Acceleration Firms** on the basis of practical needs of domestic businesses on 1/8 and 3/10, 2016 respectively to **enhance the equity fundraising platform function of securities** firms and to bring flexibility and convenience to fundraising activities

✓ In the first half of 2016, Taipei Exchange held 31 promotional events for GISA Board and crowdfunding business of securities firms

Taiwan´s fintech developing programs

4. Encouraging insurance industry to develop innovative products using Big Data applications of Fintech

- Purpose of Action Plan： Increasing competitiveness of the insurance industry through fintech development and meeting diverse market demand through research and development of innovative products

- Future promotion methods：
  - ✓ Encouraging the insurance industry to develop innovative products using **Big Data applications**
  - ✓ Speed up the review process for health management insurance products **with spillover effect**

金融監督管理委員會

Taiwan´s fintech developing programs

4. Encouraging insurance industry to develop innovative products using Big Data applications of Fintech

- Achievements to date：
  - ✓ Non-life insurance: The **IoV UBI** product of voluntary automobile insurance of a non-life insurance company approved by the FSC on 2/5, 2016
  - ✓ Life insurance: Encourage insurance industry to develop products with a spillover effect, such as health management insurance policies

Taiwan´s fintech developing programs

5. Establishing a web-based mutual fund sales platform and developing "Robo advisor" service

- Purpose of Action Plan： Establishing **a web-based mutual fund sales platform** to address Fintech development and trends and diversify fund sales channels
- Future promotion methods：
  - ✓ Establishing a platform providing customers with a comprehensive line of products and convenient transaction services
  - ✓ Improving information service of the platform
- Achievements to date：
  - ✓ Approved the web-based mutual fund sales platform operated by FundRich Securities Co. Ltd

金融監督管理委員會

Taiwan´s fintech developing programs

6. Cultivating Fintech talent in the financial industry in response to financial technology developments

- Purpose of Action Plan： Supervising and assisting the financial industry to actively cultivate financial technology talent for enhancement of digital finance expertise

- Future promotion methods：
  - ✓ Having **Taiwan Financial Services Roundtable Co.** assembling the FSC´s affiliated and financial institutions to set up ´´ **Fintech Development Fund** ´´
  - ✓ The fund is entrusted by **Institute for Information Industry** to conduct ´´ **Fintech startups and talents Cultivating Programs** ´´

Taiwan´s fintech developing programs

6. Cultivating Fintech talent in the financial industry in response to financial technology developments

- Achievements to date：
  - ✓ Holding ´´ Fintech Innovation Base´´forum
  - ✓ cooperate with Startupbootcamp to assist Taiwan´s innovation teams connecting with the world.
  - ✓ Had chosen 15 teams to cultivate in the first stage including 5 teams subsidized
  - ✓ Promoting campuses´ talents cultivation cooperation including 18 campuses ´deepening and post-college education programs
  - ✓ Promoting cooperation with USA' MIT and UK ' Open University to introduce international authenticated fintech experts cultivation programs

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Taiwan´s fintech developing programs

7. Creating Digital Environment for Book Entry Activities

- Purpose of Action Plan： Creating web-based, mobile service interface and straight through processing-STP operation platform for innovative service of digital book entry operation

- Future promotion methods ：
  - ✓ Planning for mobile securities deposit statement and gradually deregulating that allow book entry activities in a virtual environment
  - ✓ Enhancing information exchange mechanism and establishing a STP information platform

Taiwan´s fintech developing programs

7. Creating Digital Environment for Book Entry Activities

- Achievements to date：

✓ Approved the plan of Taiwan Depositary & Clearing Corporation for mobile phone securities deposit statements on 7/1, 2016

✓ Approved the proposal of Taiwan Depositary & Clearing Corporation that allows investors to conduct book entry activities in a virtual environment

Taiwan´s fintech developing programs

8. Developing Applications of Distributed Ledger Technology

- Purpose of Action Plan： Promoting and developing applications of distributed ledger technology

- Future promotion methods ：

✓ Promoting and encouraging financial institutions to be involved in research and development of it

✓ Encouraging financial institutions to actively participate in international research projects or join alliances

- Achievements to date：

✓ **Taipei Fubon Bank, Cathay United Bank, and E. Sun Bank** have researched on the technology

✓ **National Taiwan University** has established a **Fintech and blockchain center** for research purposes.

Taiwan´s fintech developing programs

9. Establishing a Financial Information Sharing and Analysis Center

- Purpose of Action Plan： Establishing a **Financial Information Sharing and Analysis Center** to enhance the mechanism for dealing with information security contingencies and protecting information security

- Future promotion methods ：
  - ✓ Building **F-ISAC** since 2017
  - ✓ Incorporating financial industries into the joint defense system
  - ✓ Establishing interagency information sharing and mechanism
  - ✓ Developing F-ISAC operation model

- Achievements to date：**Taiwan Stock Exchange** created an **information sharing platform** for affiliated institutions for trial purposes in May 2016

金融監督管理委員會

Taiwan´s fintech developing programs

10. Establishing an Authentication and Identification Service Center

- Purpose of Action Plan： Providing a **convenient, fast, and diversified** authentication and identification mechanism

- Future promotion methods ：
  - ✓ **Short-term**: create an authentication and identification center and design the service framework
  - ✓ **Mid-term**: laying down operating guidelines that meet ISO/IEC 29115 international authentication and identification standards and define trust levels of different credentials
  - ✓ **Long-term**: introducing new credential verification methods, developing new verification mechanism

Taiwan´s fintech developing programs

10. Establishing an Authentication and Identification Service Center

- Achievements to date：
  - ✓Users can apply to a financial institution for financial certificates for electronic financial transactions, including online banking transactions, e-order transactions of securities, futures and funds, and online electronic transactions of insurance policies, etc.
  - ✓A citizen digital certificate can be used as a tool to **authenticate identity** in related financial service transactions, including **online insurance application**

Taiwan´s fintech pilot programs

For encouraging financial companies innovating their services, while requesting them striking the balance between innovation and consumer protection

Financial institutions apply for new business according to appropriate regulations

The FSC will authorize the applicant a period of experiment period, and request it viewing affairs about customer protection, regulatory compliance, and information security to make sure its qualification

The FSC will approve or object it according to applicant´s experiment reports

The Business Of Connecting Businesses
Your Benefits, Your Call !

The Core Group

向威投顧 EverGrow SICE

a subsidiary of The Core Group

Implementation of FinTech in Asia

Michael S Chang
CEO & Chairman

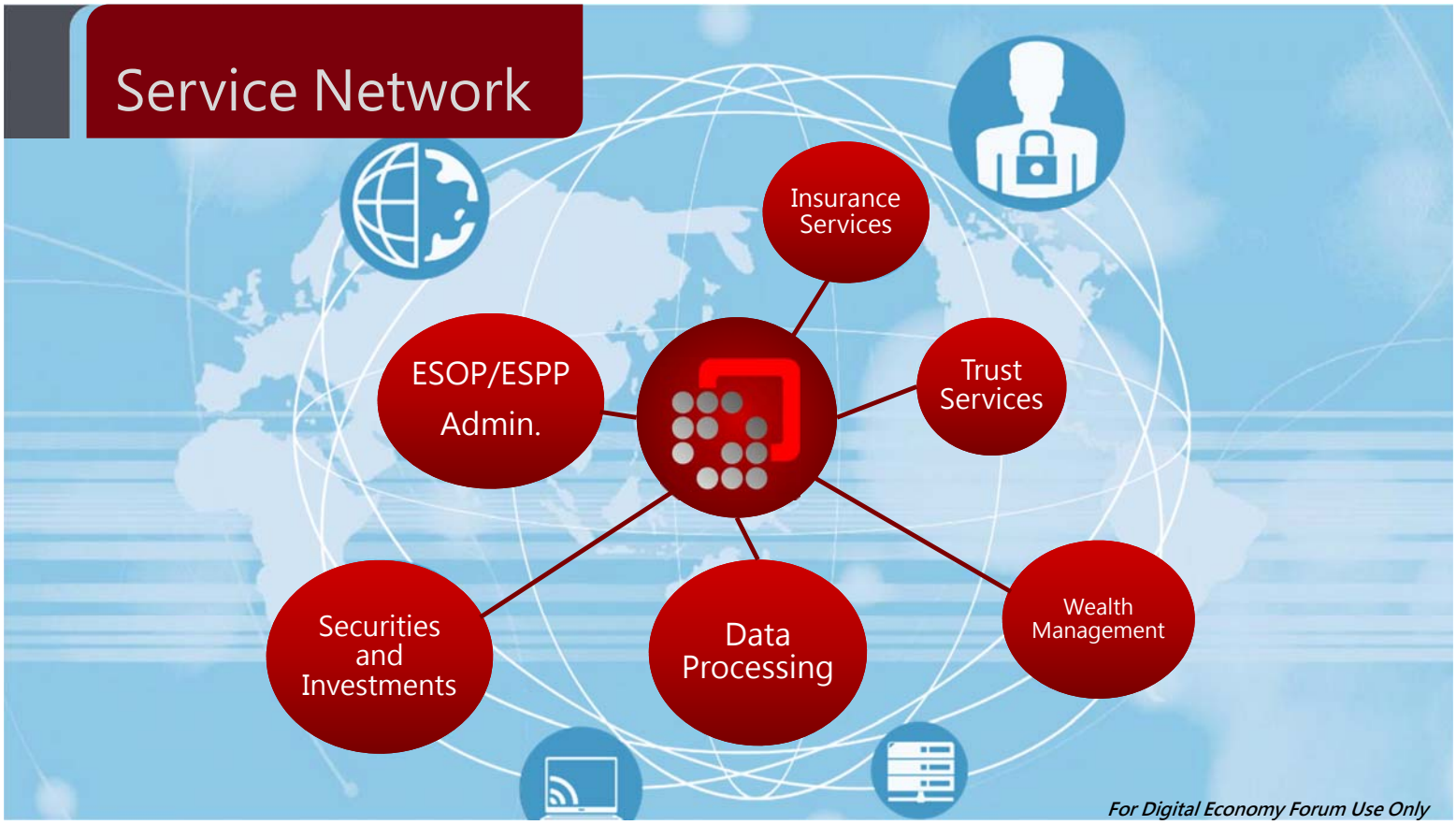
October 13, 2016

Group Overview

- ✓ TCG was established in 2006
  - ➢ Taipei / San Francisco / Hong Kong/ Beijing / Shanghai
- ✓ Adopted Industry-leading expertise in Technology and Finance
  - ➢ 2006 Internet Platform
  - ➢ 2007 Virtual Server & Cloud Computing
  - ➢ 2008 Software as a Service Model
  - ➢ 2009~2016
    - SSAE 16 Certification (previously known as SAS 70)
    - Begin to obtain license for regulated activities
    - Strive for meeting international standards
    - Setting standards for different service locations
- ✓ B2B clients are publicly traded companies in the US and Asia Pacific Region (Hong Kong, Taiwan, Japan, and Singapore)
  - ➢ Employee Flexible Benefit Plans
  - ➢ Flexible Employee Benefit Plans and Services
- ✓ B2C clients are internet useful information
  - ➢ Wealth Management

The Business of Connecting Businesses

Service Network



For Digital Economy Forum Use Only

Diverse Customer Base

The Core Group

*Clients listed above have provided written authorization to be displayed.

Regulatory Aspects

The Core Group

- Realtime Risk & Compliance Management
  - Prevent monetary losses
  - Avoid unintended or intended violation of regulations
- Meet and/or exceed local regulatory requirements
- Facilitate cross-boarder transactions
- Real-time
  - Reporting
  - Informed Decision

Data Intergrity

The Core Group

Intuitive, Flexible, and Secure Platform

- A one stop, cloud service platform
- 24 hour service
- Tailored System solutions based on a thorough understanding of client needs
- All data held in TCG systems is maintained at a secured Data Center meeting international standard.

MyCoreInfo®

Sales Opportunities

The Core Group

- **Data Analysis & Opportunity**
  - Need
  - Must
  - Good to have

  Example: *Company identifies group medical coverage through the needs and past reimbursement claims in order to place emphasis on coverage needed to reduce excessive premium paid. Insurance company will have a clear view of past performance to issue adequate policies.*

  End Result: *Employees are well covered and company is spending adequate level of premium for policy that insurance company is willing to underwrite.*

Financial Services

The Core Group

My Smart Advisor

- Personal Financial Tracker
- Financial Objective Projections
- Evaluate Risk vs. Potential Return
- Hypothetical Analysis
- Work with an Experienced Advisor

Know Your Client, Suggest & Implement Sounded Investment Plans

Reporting

The Core Group

- Big Data Analysis
- Real-time and crossed boarder cost controlling or budgeting
- Identify & resolve issues in a timely fashion

Encourage Entrepreneur

The Core Group

- Reliable
- Compliant
- Support
- Risk Management

Encourage Independent Financial Advisors

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The Core Group

Thank you!

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附件 5

國家發展委員會
NATIONAL DEVELOPMENT COUNCIL

國家發展委員會新聞稿

發布日期：105 年 10 月 14 日
聯 絡 人：張惠娟、何昇融
聯絡電話：2316-5910、2316-5618

第二屆「臺美數位經濟論壇」

第二屆「臺美數位經濟論壇」(U.S-Taiwan Digital Economy Forum) 10月13日在美國華府召開，延續去(2015)年首屆會議成果，雙方政府及企業代表持續針對當前主流的數位經濟相關議題進行更廣泛的政策討論與交流，過程圓滿順利，會後並發布聯合新聞聲明，臺美雙方在數位經濟的合作關係更向前邁進一大步。

本次論壇分別由國發會龔副主委與美國國際通訊暨資訊政策協調人 Daniel Sepulveda 大使擔任臺美雙方代表團團長，美方官方代表包括國務院、商務部、美國貿易代表署、聯邦通訊委員會、國家標準與技術局(NIST)、聯邦貿易委員會及美國在臺協會(AIT)代表；我方代表團則包括國發會、行政院科技會報辦公室、經濟部、法務部、金管會及駐美國臺北經濟文化代表處(TECRO)代表參加。另外，也擴大邀請臺美雙方相關業界代表與會，從業界的觀點，提供經驗分享與政策建議。

我方代表團並於11、12日論壇召開前，先行拜會美國國務院、商務部、聯準會等單位，針對數位經濟有關議題進行深入的意見交流。

本次論壇議題經過臺美雙方多次磋商，主要針對數位經濟發展的環境與規範、數位貿易與隱私規則、物聯網(IoT)與智慧城市、數位金融(Fintech)等四大議題進行交流，以強化雙邊數位經濟相關產業的合作與發展，促進臺美雙方在數位經濟發展上的共同利益。

國發會龔副主委於開幕致詞時提到，由於數位經濟發展已是當前重要的國際經貿趨勢，我國正研擬「數位國家、創新經濟發展方案」，以擘劃臺灣數位經濟的發展藍圖。同時，也將透過「亞洲・矽谷推動方案」等重要旗艦型計畫加以落實，並期待臺美雙方能就人才、資金、技術等層面，進行深度交流與合作。

會後臺美雙方共同發布聯合新聞聲明，重點如下：

一、 雙方支持以下工作：建立促進數位經濟之創新、貿易、投資及成長之政策與法規環境；以及公平、透明與可預測之政策與法規環境；包容、開放、透明化之網路治理制度；促進隱私權保護及跨境資訊流通。

二、 雙方支持促使數位貿易蓬勃發展之高標準原則，並承諾透過自由開放的網路與無邊界之商務來促進數位經濟。

三、 雙方強調促進創新創業發展，以及促進臺美創投業者、創業群聚及創新業者更緊密的合作。雙方也確認智慧財產及授權對擴大雙向技術貿易與投資的重要性。

四、 與會者分享智慧城市計畫發展現況，並鼓勵雙方進一步合作，經由美國國家標準與技術局與我國國發會於全球城市團隊挑戰計畫(GCTC)及「物聯網促進智慧城市架構」下之公共工作群，研究智慧城市及物聯網技術。

五、 雙方探討透過全球連結倡議(Global Connect Initiative)合作擴大網路連結，達成至2020年增加15億上網人口的目標；臺美在全球合作及訓練架構(GCTF)備忘錄基礎上，執行以擴大網路連結及縮短數位落差為目標之聯合計畫。

美國在臺協會(AIT)及駐美國臺北經濟文化代表處(TECRO)

第 2 屆數位經濟論壇聯合新聞聲明

以下聯合新聞聲明內容係第 2 屆數位經濟論壇結論

2016 年 10 月 13 日臺美雙方資深官方代表，在美國在臺協會(AIT)及駐美國臺北經濟文化代表處(TECRO)的協助下，在美國華盛頓召開第２屆數位經濟論壇，以推動對降低數位貿易發展障礙及提高全球數位經濟成長極具重要性之政策與實務協調。

論壇期間，雙方公私部門代表就促進數位經濟之共同優先議題進行討論，例如：建構支持數位發展之非過度監管的政策與法規環境；追求高標準的數位貿易與隱私規則；創新及運用物聯網與智慧城市相關新科技；採用金融科技增加金融商品與服務及改善效率等。

臺美雙方確認支持以下事項：

1.促進數位經濟之創新、貿易、投資的成長政策與法規環境；

2.政策與法規形成與執行期間，與私部門諮詢與參與等之常態化，建立利益關係人能以公平、透明、可預測性方式參與之明確程序；

3.建立包容、開放、透明且積極支持多方利益關係人之網路治理制度；

4.執行並推動隱私權及資料保護適用架構，以促進隱私權保護及跨境資訊流通；例如 2011 年 APEC 領袖會議通過的 APEC 跨境隱私規則制度(APEC Cross Border Privacy Rules system)。

5.促進資訊跨境自由流通。

雙方也重申以「AIT－TECRO 貿易暨投資架構協定(TIFA)」做為臺美官方解決雙邊貿易議題的主要場域。TECRO 代表表達支持促使數位貿易蓬勃發展之高標準原則，以及承諾透過自由開放的網路與無邊界之商務來促進數位經濟。

雙方強調促進創業發展，以及尋求機會推展以促進臺美創投業者、創業群

聚及創新業者更緊密合作之重要性。雙方也確認智慧財產及授權對擴大臺美雙向技術貿易與投資的重要性。

與會者分享智慧城市相關計畫之發展情形，並鼓勵透過 AIT 及 TECRO 進一步推動，由美國國家標準與技術局(NIST)與我國發會於全球城市團隊挑戰計畫(Global City Teams Challenge, GCTC)及「物聯網促進智慧城市架構」(IoT-Enabled Smart City Framework)下之公共工作群，研究智慧城市及物聯網技術之合作。雙方重申支持發展自發性、產業導向及市場驅動之全球標準。

雙方探討全球連結倡議(Global Connect Initiative)以合作擴大網路連結，達成至 2020 年增加 15 億上網人口的目標。TECRO 代表表示支持該倡議，雙方將以 AIT-TECRO 全球合作及訓練架構(Global Cooperation and Training Framework, GCTF)備忘錄，執行以擴大網路連結及縮短數位落差為目標之聯合計畫。

AIT 代表團由美國國際通訊暨資訊政策協調人 Daniel Sepulveda 大使率團，美國貿易代表署副代表 Holleyman 大使就數位經濟與貿易致詞，團員包括國務院、商務部、美國貿易代表署、聯邦通訊委員會、國家標準與技術局(NIST)、聯邦貿易委員會及 AIT 代表。TECRO 代表團由國發會副主任委員龔明鑫率領國發會、行政院科技會報辦公室、經濟部、法務部、金管會及 TECRO 代表參加。美國及臺灣業界代表亦參加論壇。

MEDIA NOTE

October 14, 2016

The American Institute in Taiwan (AIT) and the Taipei Economic and Cultural Office in the United States (TECRO) Joint Statement on the 2nd Digital Economy Forum

The following is the text of a joint press statement issued at the conclusion of the 2nd Digital Economy Forum.

On October 13, 2016, senior representatives from the United States and Taiwan authorities, under the auspices of the American Institute in Taiwan (AIT) and Taipei Economic and Cultural Representative Office in the United States (TECRO), held the second Digital Economy Forum in Washington, D.C., to promote coordination on policies and practices that are critical to reduce impediments to and enhance the growth of the global digital economy.

During the Forum, the two sides held discussions with U.S. and Taiwan industry representatives on shared priorities to enable expansion of the digital economy, such as fostering "light touch" policy and regulatory environments to support digital development; pursuing high standards for digital trade and privacy; innovating and deploying new technologies related to the Internet of Things (IoT) and smart cities; and adopting financial technologies to improve availability and efficiency of financial sector products and services.

The two sides affirmed support for the following:

- policy and regulatory environments that promote innovation, trade, investment, and growth in the digital economy;
- normalization of private sector consultations and input during policy and regulatory formation and implementation, with clear processes for engaging stakeholders that are fair, transparent, and predictable;
- an inclusive, open, and transparent system of Internet governance and active support for the multistakeholder approach;
- enhancing privacy protections and enabling cross border data flows by implementing and promoting applicable frameworks for privacy and data protection, such as through the APEC Cross Border Privacy Rules system, endorsed by APEC leaders in 2011;
- policies that facilitate the free flow of information across borders.

The two sides also reaffirmed the AIT-TECRO Trade and Investment Framework Agreement as the key forum for U.S. and Taiwan authorities to resolve bilateral trade issues. The TECRO representatives expressed support for high-standard principles that will permit digital trade to flourish, and committed to promote the

digital economy through a free and open Internet and commerce without borders.

The two sides underscored the importance of facilitating the development of start-ups and of seeking opportunities to promote closer cooperation between U.S. and Taiwan venture capital firms, start-up clusters and innovators. Both sides also affirmed the importance of intellectual property rights and licensing to expand two-way technology trade and investment between the two economies.

The participants shared information on the status of smart city projects and encouraged further collaboration through AIT and TECRO between the National Institute of Standards and Technology (NIST) and the National Development Council (NDC) on research for smart city and IoT technologies through the Global City Teams Challenge program and the IoT-Enabled Smart City Framework public working group. They reiterated support for the development of global standards that are voluntary, industry-led, and market-driven.

The two sides explored cooperation to expand Internet connectivity through the Global Connect Initiative, aimed at connecting an additional 1.5 billion people to the Internet by 2020. The TECRO representatives expressed support for the initiative and the two sides committed to carry out a joint program that aims to expand Internet connectivity and bridge the digital divide through the AIT-TECRO Global Cooperation and Training Framework MOU.

The AIT delegation was led by Ambassador Daniel Sepulveda, U.S. Coordinator for International Communications and Information Policy. Deputy U.S. Trade Representative (USTR) Ambassador Holleyman gave remarks on the digital economy and trade. Participation included officials representing the Department of State, Department of Commerce, USTR, the Federal Communications Commission, NIST, the Federal Trade Commission, and AIT representatives. The TECRO delegation was led by NDC Deputy Minister Dr. Kung Ming-Hsin, and included representatives from NDC, Office of Science and Technology of the Executive Yuan, Ministry of Economic Affairs, Ministry of Justice, Financial Supervisory Commission, and TECRO representatives. U.S. and Taiwan industry representatives also participated in the forum.

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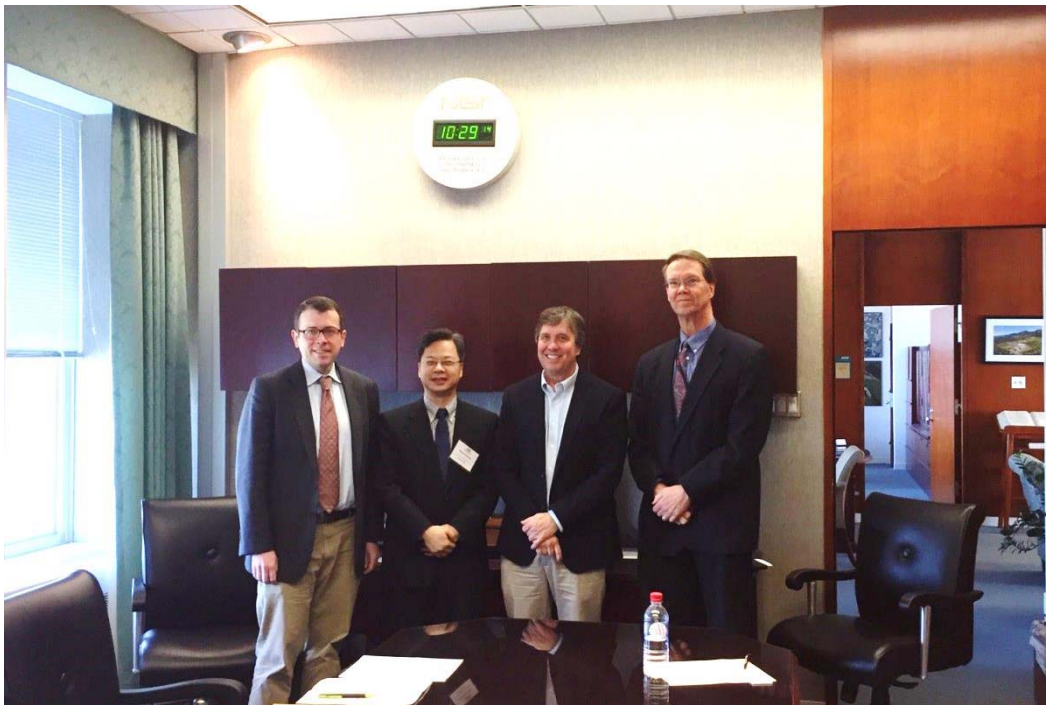
附件 6

第 2 屆臺美數位經濟論壇－會議暨活動照片

一、 10 月 11 日拜會美國商務部「國家標準與技術局」(NIST)



照片 1：龔副主委與 NIST 主管實驗室計畫副所長(相當於副次長層級)Dr. Kent Rochford、主管資訊技術實驗室副所長 Dr. James St. Pierre 及資深資訊技術政策顧問 Adam Sedgewick 合影

照片 2：龔副主委率團員與 NIST 主管網宇實體系統(CPS)實驗室助理所長 Dr. Sokwoo Rhee 等合影

二、 10 月 12 日拜會美國國務院、華府智庫「全球臺灣研究中心」

照片 3：龔副主委率全體團員與國務院經濟暨商業事務代理助卿 Thomas S. Engle 等合影

照片 4：龔副主委率與華府智庫「全球臺灣研究中心」董事長賴義雄博士、副董事長賴兌昀女士及執行長蕭良其先生合影

三、 DEF 會議第 1 天(10 月 13 日)

照片 5：臺灣代表團團長，國家發展委員會龔副主任委員明鑫致開幕詞

照片 6：美方代表團團長，國務院國際通訊暨資訊政策協調人 Daniel Sepulveda 大使致開幕詞，其右為美國貿易代表署副代表 Robert Holleyman 大使出席做 keynote 演講

照片 7：臺美雙方代表團成員，針對當前主流的數位經濟相關議題進行廣泛的政策討論與交流

照片 8：龔副主委回應美方提問

照片 9：美方 Daniel Sepulveda 大使回應我方提問

四、 DEF 會議第 2 天(10 月 14 日)

照片 10：DEF 第 2 天(14 日)中午舉行論壇閉幕暨「臺美在網路時代之合作展望座談會」，雙方團長宣布本屆 DEF 聯合新聞聲明內容

照片 11：臺灣代表團團長，國家發展委員會龔副主任委員明鑫致閉幕詞

照片 12：美方代表團團長，國務院國際通訊暨資訊政策協調人 Daniel Sepulveda 大使致閉幕詞

照片 13：「臺美在網路時代之合作展望座談會」與談情形

照片 14：龔副主委於會後接受媒體採訪