

出國報告（出國類別：考察）

美國消費性電子展發展趨勢

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摘要

經過金融風暴後，消費性電子產業似乎有慢慢復甦的跡象，藉由這次的考察，更能體會與瞭解整個產業的發展趨勢。此外搭配固本計畫合作廠商一起拜訪數位電視相關廠商，讓筆者更能深入體會這個產業的合縱連橫。另一方面，讓以往只在學術殿堂探索的我，更能體會產品開發與創新的重要性。

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目的

筆者最近執行國科會固本計畫，希望所開發的產品能更貼近消費者需求，並藉此次機會了解競爭對手的規格與產品定義。除此之外，搭配揚興科技公司參與此展覽，順便深入拜訪 Yahoo、Broadcom、Dlink、Viewsonic 和 Apex 等公司。會場中亦發覺相當多好玩與新奇的產品，對於數位電視之家電產品，有深入體驗各家產品的差異，讓筆者受益良多。

過程

由於美國消費性電子展是在 1 月 7 日至 1 月 10 日，也是美國年假結束後的數日，因此許多學子返國度假亦準備回校上課，再加上國內各大廠的積極參與，所以班機幾乎都客滿。筆者只好提前至 1 月 4 日晚上出發，從台北飛往舊金山，再轉機至拉斯維加斯，到達目的地已是美國時間 1 月 4 日晚上 11 點多。

休息一整日並調整時差，1 月 6 日與揚興科技公司的業務與研發兩位副總會合，並一起拜訪 Viewsonic (攤位在 MGM Signature)，瞭解 Viewsonic 從幻燈機起家到顯示器再演進至家電的消費性產品。接下來拜訪 Yahoo(攤位在 convention center)，瞭解網路電視如何利用 Yahoo widget 來便利地上網。最後到訪 Apex (攤位在 convention center)，這家公司主要生產有價格競爭力之電視相關產品，並得知去年銷售 4 百萬套美規 converter box。晚上與揚興科技公司的合作夥伴 Fujisoft 公司 Shingo Murayama 共進晚餐，得知日本數位電視的市場情況以及日本政府的推廣方案。

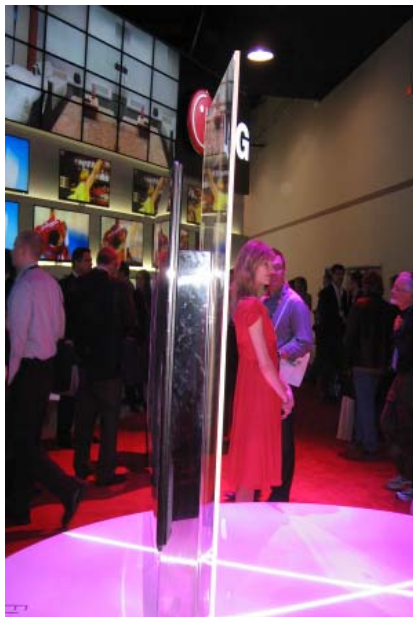
1 月 7 日消費性電子展正式開幕，今年大約湧進 11 萬多次，比去年 9 萬多次增加不少，所以一大早各路線通往 convention center 都大排長龍。今日重點參訪各大電視品牌廠的產品，首先從 center hall 進入就可發現今年電視主軸是 3D TV，或許是受到「阿凡達」電影熱賣所賜，各個 3D 展示都是前壅後擠。以下列出主要電視廠家之產品重點:

(1) Toshiba: Cell TV

- More detail
- More brightness
- More contrast
- More connected
- More 3D
- More Impressive



(2) LG: 6.9mm 55" LED TV



(3) LG: 84" LCD TV (Ultra High Definition)



(4) LG: Skype on TV



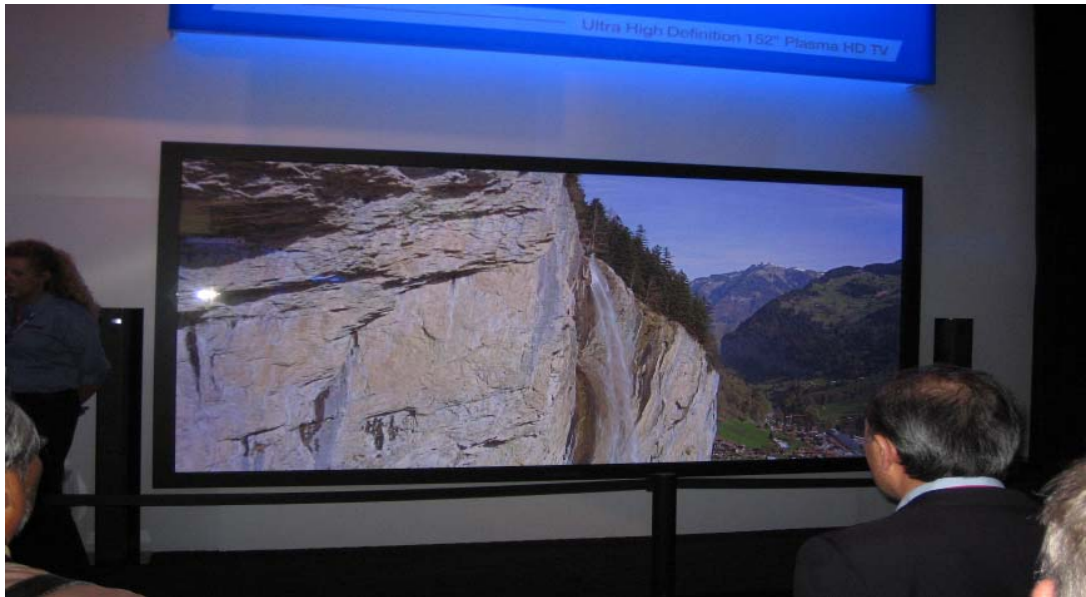
(5) LG: 72" 3D LCD TV



(6) Samsung: LED TV



(7) Ultra High Definition 152" Plasma TV



1月8日參訪重點仍是數位電視相關產品，以下列出相關重點拍攝。

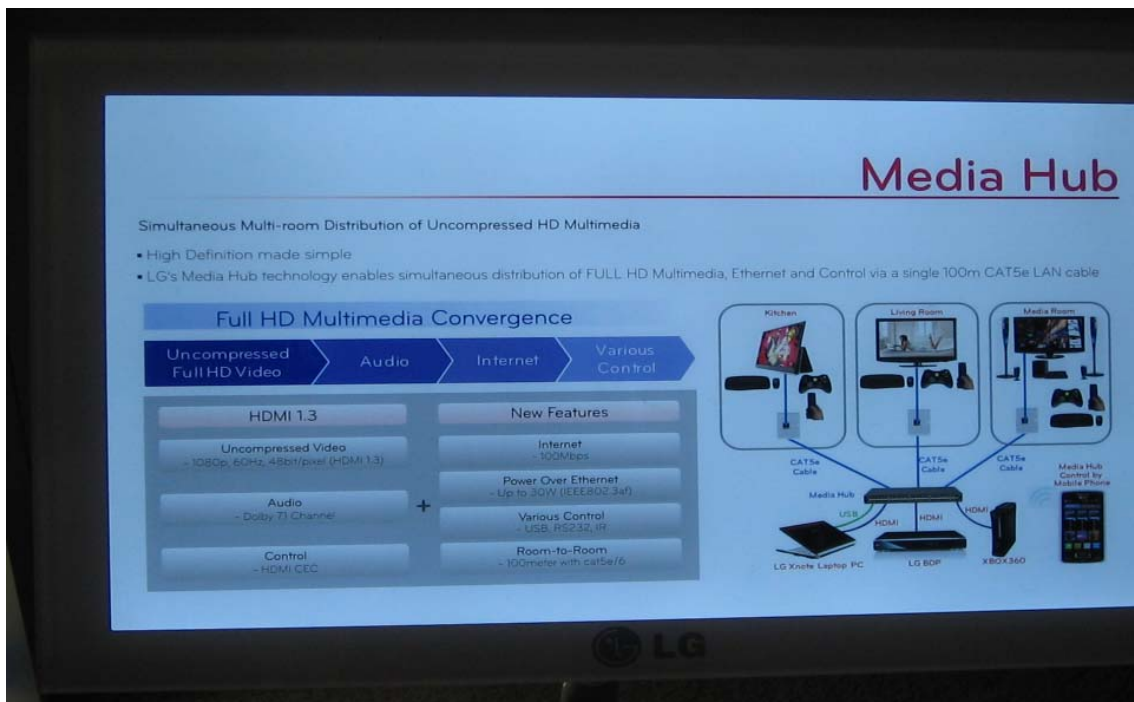
(1) Mobile ATSC Digital TV



(2) 3D Remote TV Controller



(3) LG Media Hub



(4) AQUOSNet from Sharp



(5) Taking a picture at Sharp booth



從這兩日參訪數位電視產品，可結論出下列重點：

- 3D (almost all TV makers)
- Fourth color – Yellow (Sharp)
- Twitter (Samsung & Sharp)
- Skype (LG and Panasonic)
- TV viewing on the TV remote (Samsung)
- 3D Blue-Ray players (Panasonic)
- 3D video camera (Panasonic)

1月9日參訪重點是電子書、照相機與機上盒等相關產品，以下列出相關重點。

(1) E-Reader

- Wireless “printing”
- Dual-screen readers with both LCD and E Ink
- Reader specifically designed for recipes in kitchen
- Plastic Logic
- http://www.youtube.com/watch?v=Zn14MNP0GjE&feature=player_embedded

(2) Personal Internet Viewer

- Chumby's successor, the Sony “Dash”
- [Dash Personal Internet Viewer](#), US\$199
- Giving you the time, weather, traffic, sports, social networking, movies, music, games and more
- Dash doesn't look anything like a Chumby — it's black and hard-edged and very high tech with a nice big display — it is indeed “powered by Chumby.”
- Chumby seems to have grown up

(3) Over the Top

- [Roku box](#) delivers Netflix's instant Internet movie service
- [Boxee Box](#), a device that feeds Internet content to a television

- [Hulu](#) is an effort by the parent company of NBC to make its shows available directly on the Internet; [Boxee](#) is a software program that lets you play videos and music to your television.

(4) Perfect Point-and-Shoot Camera

- Features:
 - Pocket-sized camera
 - 12.1 Mega Pixels
 - VGA resolution to 720P (progressive scanned) high definition
 - do better than previous generations in bright light
 - in some special situations, like on a sunlit beach, the screen image would not be visible.
- Casio's High Speed [Exilim EX-FH100](#) has an impressive 10x optical zoom and a burst mode that records up to 40 frames per second, and either allows you to select the best image from the set or does so automatically.
- Kodak's EasyShare cameras let you tag photos or videos when you take them so later, when you attach the camera to your computer, they automatically upload to Facebook or YouTube.
- Canon's new PowerShots boast 24 mm wide angle lenses and touch screen controls.
- Nikon's [CoolPix S1000pj](#) has a built in projector for instant slide shows.

1 月 10 日參訪重點是玩具、Yahoo widget 與 Android setup box 等相關產品，以下列出相關重點。

(1) Radio Controlled Helicopters

- Two video cameras that send a feed to your iPhone.
- The usefulness of this feature escaped me until I found myself sitting behind a wall of cameras that blocked my view at a press conference

- I started thinking that if I had that video hovercraft with me I could send it up in the air and look right over those annoying heads.
- <http://ardrone.parrot.com/parrot-ar-drone/videos/#player>



(2) Yahoo Widget

- TVs (Sony, VIZIO, Samsung, LG)
- Box (Tivo with Yahoo weather, traffic, etc.)
- <http://connectedtv.yahoo.com>

(3) Android Set-Top Box

- First set-top box from MIPS
 - Full HD
 - Multi-channel audio
 - Enhanced user interfaces
 - Optimizations of Android 2.0 for its MIPS32 architecture.
- Another set-top box prototype developed by KDDI R&D Labs

心得及建議

這次考察獲得相當多從學術會議中無法獲得的資訊，特別是這個展覽強調產品的創新性與實用性。從數位電視的發展角度觀之，這次展覽讓我結論出使用者觀看電視的需求：音視訊品質展現的要求、方便與有善的介面、使用者決定觀看的節目與時機以及各種裝置皆能收看電視節目(例如電視、電腦、手機等)。這些重點與實物的感覺將有助於筆者產學合作的規劃與開發，因此建議學校的學者除了參加學術會議外，爲了學以致用，這種大規模的消費性電子展是非常值得參與，因爲各家公司都會把最新最好的產品作展出，以吸引消費者的目光，並帶領風潮，進一步達到產品熱銷。