

## 摘要

### 壹、研究目的

本研究透過「電話及網路調查」瞭解臺北市民眾收視習慣、臺北市有線電視裝機情形、臺北市有線電視系統收視戶轉換情形、臺北市有線電視系統收視戶的收視情形及滿意度、臺北市有線電視公用頻道收看率、臺北市數位有線電視使用情形及滿意度與對臺北市有線電視現行收費看法、對分組付費看法等；並透過「神秘客調查」瞭解臺北市有線電視系統業者之服務品質；另針對有線電視一般收視戶及專家學者辦理「焦點座談會」，期透過質化資料輔助電話調查結果，瞭解臺北市有線電視系統業者的服務品質，以及收視戶對業者提供服務的滿意度。

### 貳、研究過程

量化研究方面，調查對象主要是針對臺北市家戶(包含有線電視收視戶及非收視戶)，受訪民眾條件為年滿 18 歲及以上的成年民眾，電話調查的部分，運用「電腦輔助電話訪問法」(computer-assisted telephone interviewing, CATI)，用市話進行電話訪問，抽樣設計採分層隨機抽樣法，以臺北市 12 個行政區為分層依據，各層內採比例配置樣本數，本次調查採用任意成人法進行電話訪問，由訪員直接訪問接電話之合格受訪民眾進行訪問；網路調查的部分，以「電腦輔助網路調查系統 WIN CAWI」(Computer Assisted Web Interview, 簡稱：CAWI 系統)，網路問卷的方式設計問卷，將網路問卷網址放置於臺北市政府觀光傳播局的官方網站以及臺北市政府 LINE 官方帳號，透過以上管道蒐集居住在臺北市且年滿 18 歲以上的民眾填寫，被訪者可透過電腦或手機完成訪問。調查結果顯示電訪調查與網路調查的族群組成有所差異，電話調查族群以女性、60 歲以上、家事管理及退休人員為主，網路調查族群則以男性、30-49 歲、事務工作人員及服務工作人員及售貨員為主。

質化研究方面，分別進行神秘客調查及焦點座談會，在神秘客調查方面，分為客服人員電話禮貌測試及現場維修人員服務品質測試，電話禮貌測試部份，針對 10 家有線電視系統業者客服人員，透過神秘客訪員執行及研究員評分，以獲

得更全面性之服務品質調查結果，調查面向包括「接聽速度」、「告知姓名」、「禮貌用語」、「專業能力」、「服務態度」；現場測試部份，針對 10 家有線電視系統業者工程人員，透過專業認證訪員，在進行現場施測後，分別在外觀感受、基本測試以及情境模擬與整體感受分別進行評分。焦點座談部份，分別邀請 18 歲以上有線電視收視戶共 9 名及有線電視產業之專家學者共 7 名參與，針對收視戶的收視情形，以及對臺北市有線電視系統的期待及建議進行討論。

電話調查期間為 106 年 7 月 12 日至 8 月 9 日執行，於平日晚間時段(18:30~22:00)及假日下午、晚間時段(13:30~17:30、18:00~22:00)執行調查，調查共計成功訪問 4,381 份臺北市民眾(包含電視收視群及非電視收視群)，其中成功訪問有線電視受訪民眾 3,318 份，在 95% 的信心水準下，抽樣誤差在 $\pm 1.7\%$ 之間；網路調查期間為 106 年 8 月 2 日至 8 月 15 日執行，共完成 358 份，其中為有線電視受訪民眾有 325 份，在 95% 的信心水準下，抽樣誤差在 $\pm 5.4\%$ 之間；神秘客電話訪問期間為 106 年 8 月 7 日至 8 月 12 日執行，每家業者各進行 5 種測試狀況，共完成 50 份有效訪問，現場工程人員測試期間為 106 年 8 月 7 日至 8 月 21 日執行，每家業者各進行 2 次現場測試，總計完成 20 份有效評分表。於 106 年 8 月 12 日舉辦有線電視收視戶焦點座談會及 106 年 8 月 14 日舉辦專家學者座談會。

## 參、重要發現

### 一、臺北市民眾收視習慣與有線電視裝機情形

本次電訪調查中，共計成功訪問到了 4,381 位臺北市民，在其他平臺收看電視節目部分，以「手機或平板上網收看電視節目」的比例最高，占 58.4%；其次為「用電腦上網」(53.3%)、「數位無線電視」(43.5%)等，相較於 105 年的調查結果，在使用手機、平板或電腦上網收看电视的比例皆有上升；而其中有 3,318 位受訪民眾表示家中有安裝有線電視；住宅收視戶戶數的計算方式為：母體戶數\*裝機率。而在其統計量  $p=0.758$ ，95% 信心水準，抽樣誤差為 $\pm 1.3\%$ 下，推估臺北市市民有線電視住宅裝機率為 74.5%~77.0%之間，收視戶戶數為 782,090~808,731 戶之間。

## 二、臺北市有線電視系統收視戶轉換情形與原因

在轉換有線電視業者經驗部分，有 10.0% 的受訪民眾表示有轉換過有線電視業者，而在 332 位有轉換過業者的受訪民眾中，轉換的原因以「費率較便宜」的比例最高，占 52.5%，其次為「寬頻上網和網路電視的套裝優惠服務」(12.7%)、「服務態度比較好」(7.9%) 等；在座談會中的與會民眾也多反應其轉換因素仍以收費金額便宜及服務為主要原因。

## 三、臺北市有線電視系統收視戶的收視情形及滿意度

在電視節目收視時數部分，受訪民眾每日花「1 小時~未滿 2 小時」收看電視節目的比例最高，占 26.8%；其次為「2 小時~未滿 3 小時」(23.1%) 等。而在收看電視時段上，民眾每日在「下午 6 點~晚上 9 點」收看電視節目的比例最高，占 72.8%；其次為「晚上 9 點~晚上 12 小時」(53.0%)。

在收訊情形部分，94.2% 的受訪民眾認為家中有線電視畫面清晰。相較於 105 年的調查結果，認為清楚的比例上升了 1.3 個百分點，座談會的與會民眾也普遍認為目前有線電視的收訊品質算清晰；在斷訊頻率部分，則有 66.3% 表示過去一年內家中曾發生斷訊情形，座談會中也有與會民眾反應偶爾近期內常遇到會有斷訊、畫面出現雪花的情況以及颱風天訊號相對來說較不穩定。

在節目內容與品質部分，有 69.4% 的受訪民眾表示對家中有線電視的節目內容與品質感到滿意(包含內容與品質都滿意與其一滿意)，然相較於 105 年的調查結果，感到滿意的比例上升了 8.3 個百分點。在節目重播情形，有 62.5% 的受訪民眾認為家中有線電視節目重播情形偏多，相較於 105 年的調查結果，認為重播情形偏多的受訪民眾上升了 4.6 個百分點；在頻道數量情形，有 46.5% 的受訪民眾對家中有線電視頻道數量情形認為偏多，認為剛好的占 39.0%。

## 四、臺北市有線電視系統業者服務品質

在有線電視客戶服務部分，有 39.5% 的受訪民眾表示過去一年曾致電客服中心。而在 1,310 位撥打過有線電視客服電話的受訪民眾中，詢問客服人員問題以「有線電視故障」的比例較高，占 63.1%；在客服人員接聽速度部分，有 68.4% 的受訪民眾表示對客服人員接聽速度感到滿意，然相較於 105 年的調查結果，感到滿意的比例下降了 1.7 個百分點，且在電話禮貌測試中，針對接聽速度面向得分較其他面向低，業者尤須針對此面向進行加強，在座談會中的與會人員亦表示

客服電話有時很難撥通。在客服人員處理問題能力部分，有 77.3% 的受訪民眾表示對客服人員處理問題能力感到滿意。在客服人員服務態度部分，有 84.5% 的受訪民眾對客服人員服務態度感到滿意，然相較於 105 年的調查結果，對於客服人員服務態度感到滿意的比例下降了 1.2 個百分點。

在有線電視維修服務部分，有 33.8% 的受訪民眾表示過去一年內曾經有請業者來維修的經驗，且相較於 105 年的調查結果，有維修過的比例上升了 3.4 個百分點；而在 1,121 位過去一年曾因為家中有線電視故障請業者到府維修的受訪民眾中，以「有線電視斷訊」的比例最高，占 56.7%，其次為「畫面不清楚/雜訊干擾」(18.9%)、「機上盒故障問題」(16.7%)等。在維修人員到府維修時間方面，以「2 小時內」的比例較高，占 33.2%，其次為「超過 12 不到 24 小時」(19.9%)、「超過 24 不到 48 小時」(13.1%)等，而透過現場維修人員測試部分可發現，有線電視業者在派員維修速度上的表現獲得肯定，惟在準時性與主動表明身分上，仍有改進的空間。在維修能力部分，則有 87.2% 的受訪民眾對現場維修人員的維修能力感到滿意；維修人員服務態度部分則有 91.1% 的受訪者感到滿意。

#### 五、有線電視現行收費看法

在收視費用調查部分，有 40.6% 的受訪民眾表示有線電視業者基本頻道收視費用維持每月每戶 495 元感到合理，而在認為每月合理的收費金額則是落在「300-399 元以內」的比例較高，占 50.7%，平均而言在 274 元左右。

#### 六、臺北市有線電視公用頻道

在臺北市有線電視公用頻道部分，有 13.9% 的受訪民眾表示有看過公用頻道，相較於 105 年的調查結果，有看過公用頻道的比例上升了 0.7 個百分點。而在 463 位有看過公用頻道的受訪民眾中，有 65.1% 的受訪民眾對公用頻道感到滿意，相較於 105 年的調查結果，對公用頻道感到滿意的比例上升了 3.4 個百分點；在臺北市有線電視地方頻道部分，有 15.6% 的受訪民眾表示有看過地方頻道。而在 520 位有看過地方頻道的受訪民眾中，有 64.7% 的受訪民眾對地方頻道感到滿意。

## 七、臺北市有線電視數位化與整體滿意度

在有線電視數位化部分，針對 3,318 位家中有安裝有線電視的受訪民眾進行調查發現，家中安裝一臺數位機上盒的比例最高，占 39.6%，然相較於 105 年的調查結果，安裝一臺機上盒的比例下降了 16.2 個百分點，安裝兩臺的則上升了 8.3 個百分點。

另外針對 3,253 位家中有數位機上盒的受訪民眾進行詢問後發現，有 74.2% 的受訪民眾對到府裝設數位機上盒時的解說感到清楚，有 72.7% 對選臺器的使用感到方便；另在數位機上盒的附加功能使用中，以使用過「數位頻道」的比例較高，占 99.4%，其次為「錄影功能」(4.1%)、「隨選影片」(3.4%)等，顯示受訪民眾仍多以單純收看電視為主，有 7.0% 的受訪民眾有加購額外提供的付費服務。

在有線電視整體服務部分，有 66.0% 的受訪民眾認為有線電視業者提供的整體服務與去年相比表示滿意，14.1% 的受訪民眾認為有線電視業者提供的整體服務與去年相比表示不滿意；北都數位有線電視的受訪民眾，認為整體服務與去年相比感到滿意的比例較高，占 74.5%，其次為大安文山(69.8%)、新臺北(68.3%)等。

## 八、有線電視分組付費看法

有 58.5% 的受訪民眾對於分組付費收費方式表示贊成，麗冠有線電視的受訪民眾，對於分組付費收費方式表示贊成的比例較高，占 63.3%，其次為陽明山(62.0%)、大安文山(61.6%)等；受訪民眾認為基本頻道組合理收費金額為「300-399 元以內」最高，占 20.6%，其次為「200 元-299 元以內」(18.3%)、「199 元以下」(15.1%)等；有 26.0% 的受訪民眾表示有意願額外加購付費頻道組，63.4% 的受訪民眾只要基本頻道，不額外加購付費頻道組；受訪民眾願意額外加購套餐頻道金額為「199 元以下」最高，占 45.1%，其次為「200 元-299 元以內」(18.6%)、「300-399 元以內」(6.3%)。另外針對分組付費部分，座談會中的與會民眾普遍表示對於未來分組付費若無法「降低收視費」，那寧願維持目前吃到飽的收視方式，而不希望收視費用往上增加，顯示目前的「向上分組」政策走向，並不為消費者接受，另外有民眾表示若提高分組節目品質，仍願意多付金額加購。

## 九、OTT 應用服務

在使用 OTT 影音服務項目方面，受訪民眾平常使用 OTT 影音服務的項目以「YouTube」的比例最高，占 64.3%，其次為「愛奇藝」(23.3%)、「LINE TV」(19.3%)等；使用 OTT 觀看影音節目的主要類型以「電影」的比例最高，占 55.5%，其次為「戲劇」(53.8%)、「新聞」(37.0%)、「綜合」(35.2%)等；受訪民眾每天使用 OTT 觀看影音內容的時數，以「2 小時~未滿 3 小時」的比例最高，占 29.5%，其次為「未滿 1 小時」(26.0%)。

在付費收看 OTT 影音內容的方面，有 21.6%的受訪民眾有付費收看 OTT 平臺所提供的影音內容；另外有 30.3%的受訪民眾表示這一年內會退訂有線電視只使用 OTT 收看影音內容，有 69.7%受訪民眾表示這一年內不會退訂有線電視只使用 OTT 收看影音內容；再深入詢問未來使用 OTT 的狀況，有 30.0%的受訪民眾表示未來會退訂有線電視只使用 OTT 收看影音內容，有 70.0%受訪民眾表示未來不會退訂有線電視只使用 OTT 收看影音內容。

針對各家有線電視業者來看，網路受訪者中，除了萬象收視戶平常使用 OTT 影音服務以「愛奇藝」比例最高，其他業者收視戶皆以使用「YouTube」比例最高；詢問這一年會不會退訂有線電視只使用 OTT 收看影音內容的意願，除了北都數位收視戶表示會(50.4%)的比例較不會(49.6%)的比例高，其他業者皆是不會退訂的比例較會退訂的比例高，就會退訂的收視戶來看，依序為北都數位、金頻道、陽明山、聯維，其比例皆高於 4 成，由於受訪人數皆低於 30 人，調查結果僅供參考。

## 拾、性別分析

在此研究議題整體未有明顯性別差異，惟在使用者體驗方面有部份面向性別有差異，節目品質與內容滿意方面，女性感到都滿意(49.2%)比例高於男性(46.2%)，節目重播方面，男性認為節目重播(65.2%)比例高於女性(60.1%)，頻道數量方面，男性認為頻道偏多(50.5%)比例高於女性(43.1%)。

使用客服原因方面，男性與女性使用原因之差別在，男性對繳費問題的比例較女性高，女性在機上盒操作/故障問題的比例較男性高；男女可能觀看的節目類型有些微差異，男性收看綜合類型節目的比例較女性高，女性收看戲劇的比例較男性高。

## 肆、主要建議

臺北市開放新業者的加入，讓收視戶在安裝有線電視方面有了不同的選擇，由於新進業者會採用低價競爭、超值服務等方案吸引收視戶轉換或新安裝有線電視業者，為了避免產生消費糾紛，如廣告內容與實際不符、金錢糾紛、服務品質不好、合約糾紛等。建議相關政府機關應提早規劃消費糾紛的因應方法，以保障消費者權益。

公用頻道作為一個媒體近用的媒介，而臺北市民眾在公用頻道的收視比例上仍偏低，在此建議臺北有線電視業者可與頻道業者結合廣宣，讓民眾了解有線電視節目有公用頻道，說明其設置目的，或是進行分眾宣傳，另外亦可與大專院校、社區大學合作，提供應屆畢業學生、影視相關科系、退休教師、新住民等提供其作品於公用頻道播放，或是與民政局 ivoting 活動結合，讓公民參與直接討論有線電視地未來發展，以促進公用頻道之收視率，或是使用公用頻道播放公共議題的討論直播，增加民眾關注；收視戶建議應改善有線電視拉線的問題，建議政府相關單位能針對現存的電線問題進行全面的檢視，並提出改善的方案，讓臺北市整體市容的提升及降低民眾遭遇公共危險的狀況；而為了因應 NCC 有線電視全面數位化之政策，除建議業者積極主動提供相關優惠與機上盒更新外，也仰賴政府加強數位化之宣導，盡速達成此目標，同時業者也應在推動數位化過程中維持訊號穩定性，另在服務品質面如客服接聽速度、工程人員工作態度上與節目品質都是應持續關注與提升之項目，藉以提升民眾整體的滿意度。

有關有線電視分組付費政策推動方式上則有賴政府擔任民眾與業者和 NCC 間溝通之橋梁，如實反映各方情況供 NCC 之參見。業者則應因應整體收視環境之轉變提供更多元服務內容。

## Abstract

### A. Research purposes

The research via ‘telephone and network survey’ aims to understand Taipei citizens’ habits for the cable TV installation rate, cable TV system subscribers’ subscribing transition experiences in Taipei, cable TV system subscribers’ subscribing experiences and satisfaction in Taipei, the public channels’, which include channel 3 and channel 4, digital TV viewing rate, usage in digital cable TV, users’ opinions about existed charging fees policy and future tiered pricing policy.

What’s more, the research also uses penetrate mysterious shopper survey to understand the service quality of the providers for cable TV in Taipei; we hold two focus group seminars, one for general TV subscribers and the other for expert scholars, to complement quantitate telephone survey results. With above four methods we hope to solidly understand the quality of Taipei cable TV system services, and the audience’ satisfaction level.

### B. Research Procedures

In the aspect of quantitative research, the target population focuses on households in Taipei (including Cable TV subscribers and non-subscribers). The respondents are targeted adult citizens aged 18 or above. Regarding the telephone questionnaire, it was processed by means of CATI (Computer-assisted Telephone Interviewing), and used the local telephone for telephone access. The method of stratified random sampling was used by dividing the population of the 12 administrative districts of Taipei City into strata, and within each layer, the samples were in correspondent proportions. This research was processed by the means of telephone interviewing of qualified respondents who directly answered the phones. Regarding the internet survey, it was processed by the means of WIN CAWI (Computer Assisted Web Interview), who designed the internet questionnaire publicized on the official website of the Department of Information and Tourism of Taipei City Government and the LINE Official account of Taipei City Government. The Taipei residents aged 18 and over could use above approaches to complete the interviews by filling out the questionnaire with their



computers or smart phones. The results show demographic differences from the respondents between the telephone and the internet survey. The respondents of the telephone survey are mainly females aged 60 and above, housewives and retired citizens, while the respondents of the internet survey are mainly males aged 30-49, office employees, service staff and sales clerks.

In the aspect of qualitative research, it was divided into Mystery Shopper Survey and Focus Symposium. The Mystery Shopper Survey tested the telephone etiquette of service agents and tested the service quality of on-site maintenance technicians. About the telephone etiquette test, the respondents were targeted at the service agents of 10 Cable TV providers, who were investigated done by the Mystery Shoppers. The data were analyzed by the researchers with the aim of more comprehensive research results of service quality. The investigated constructs included speed in answer, giving their names, courtesy language, professional competence, and service attitude. Regarding the on-site test, the respondents were targeted at the maintenance technicians of the 10 Cable TV providers, and the test was conducted on-site by the certified interviewers evaluated by four constructs including the appearance feel, basic profession competence test, problem simulations, and the overall feelings. Regarding the Focus Symposium, we invited 9 Cable TV subscribers aged 18 and above, and 7 scholars with expertise in the Cable TV industry to discuss the subscriber's viewing experiences, expectations and suggestions to the Cable TV System Operators in Taipei.

The reference time for the telephone survey was conducted from July 12<sup>th</sup> to August 9<sup>th</sup>, 2017. The time range of week days was 18:30 ~ 22:00. The time ranges of holidays were 13:30 ~ 17:30 and 18:00~22:00. The survey successfully finished interviewing 4,381 Taipei residents (including TV subscribers and non-TV subscribers). The successful sample includes 3,318 TV viewers, and the research is achieved by a sampling error of  $\pm 1.7\%$  with a confidence interval of 95%. The reference time of the internet survey was carried out from August 2<sup>nd</sup> to August 15<sup>th</sup>, 2017. The sample includes 358 individuals, including 325 TV subscribers, and the research is achieved by a sampling error of  $\pm 5.4\%$  with a confidence interval of 95%. The telephone survey done by Mystery Shoppers was carried out during the reference time from August 7<sup>th</sup> to August 12<sup>th</sup>. There are five tested situations performed for each individual Cable TV provider and 50 successfully completed interviews. We conducted twice tests to the on-

site maintenance technicians for each individual Cable TV provider and 20 successful interviews were completed. The Cable TV Subscriber's Focus Symposium was held on August 12<sup>th</sup>, and the Experts' and Scholars' Focus Symposium was held on August 14<sup>th</sup>.

### C. Important discoveries

#### I. The people subscribing habits and cable TV installation in Taipei

Based on telephone survey, 4,381 Taipei citizens 18 or above are successfully interviewed. Respondents say that they also use other devices to watch programs. 58.4% use cellphones or tablets, 53.3% use computers, 43.5% use wireless digital TV; as compared to year 2016 survey results, above counterpart ratios increase. 3,318 of targeted sample subscribe cable TV; therefore the estimated cable TV set-top boxes installation ratio in households equals to Taipei household population multiplies estimated set-top boxes installation ratio. We estimate that cable TV set-top boxes installation ratio in households is 75.8% by a sampling error of  $\pm 1.3\%$  with a confidence interval of 95%. The cable TV set-top boxes installation ratio in households is about 74.5%~77.0%, revealing about 782,090~808,731 subscribers.

#### II. Cable TV Subscribers transition experiences and reasons in Taipei

In cable TV changing providers experience parts, 10.0% say they have transited their programs providers. 332 transition viewers say that cheaper charging fees is the main reason (52.5%), 12.7% say the main reason is for special price packages in both internet and Cable TV and 7.9% say for the better service. The results can also see in symposium while interviewers say cheaper charging fees and better service are two main reasons to transit.

#### III. Cable TV system subscribers' subscribing experiences and satisfaction level in Taipei

Regarding TV viewing span, 26.8% spend 1 hour ~ nearly 2 hours on watching TV programs, which shares the largest portions of the respondents. 23.1% fall between 2 hours ~ nearly 3 hours. As to the TV viewing session, 72.8% viewers watch TV in the session of 6pm~9pm, which shares the top leading portion of the respondents, and the second largest portion of TV viewers (53.0%) watch TV in the session of 9pm~12am.

In information situation part, 94.2% subscribers consider that pictures is clear by watching programs via cable TV, which increases 1.3% to the year 2016 survey counterpart. In break down frequency ratio, 66.3% say their cable TV broken down at least once last year. The results can also see in symposium while interviewers experienced similar break-downs especially in bad weather days.

In TV program content and quality parts, 69.4% satisfy their home cable TV content and quality feelings. As compare to year 2016 survey counterpart, satisfaction ratio increases for 8.3%. In reply program, 62.5% subscribers consider home cable TV reply more programs, which increases 4.6% compared to the counterpart in the year 2016 survey result. In the case of the number of channels, 46.5% subscribers consider channels cable TV provided are too numerous. 39.0% subscribers consider channels are just fit in number.

#### IV. Cable TV system operators' service quality in Taipei

In cable TV customer service part, 39.5% show that they have phoned to cable TV service center last year. 1,310 subscribers had called up cable TV personnel, about 63.1% asking personnel questions on cable TV breakdown. 68.4% of subscribers consider satisfied with speed in receiving calls, which falls 1.7% as compare to the counterpart in the year 2016 survey results. In testing telephone politeness, speed in receiving calls grade is lower than the others, which suggests the personnel must improve on it. The results can also see in symposium while interviewers had awful phone calls experiences. 77.3% subscribers consider satisfied with personnel members competence in coping with questions. 84.5% subscribers consider satisfied with personnel service attitude, which though falls 1.2% as compare to the counterpart in the year 2016 survey results.

In cable TV repair service, 33.8% subscribers say they have asked on-site repair service last year, which increases 3.4% as compared to the counterpart in the year 2016 survey results. 1,121 interviewers who had repairing experience last year say the top reason for signal interruption (56.7%), the second one is for cable TV unclear signal or info disturbance (18.9%), and the third one is for set up boxes breakdown problems (16.7%). In on-site maintenance technicians arriving span, 33.2% are within 2hours, 19.9% are over 12 but not 24 hours, and 13.1% are over 24 but not up to 48 hours. It is

found that 87.2% subscribers satisfy about on-site maintenance technicians' professional competence. About 91.1% satisfy maintenance technicians' attitude.

#### V. Opinions in cable TV existing charging fees' policy

In existing charging fees policy, 40.6% of subscribers feel the maximum subscribing fees for basic channels falls in NT495 per month reasonable, and 50.7% consider reasonable fees within NT300- NT399. The average fee is NT274 per month.

#### VI. Channel 3 and Channel 4 awareness and satisfaction in Taipei

13.9% of subscribers had watched public access channel (channel 3), which increases 0.7% as compared to the counterpart in the year 2016 survey result. For 463 subscribers whom had watched the public access channel, 65.1% feel satisfied, which increases 3.4% as compared to the counterpart to the year 2016 survey results. Regarding the mandatory local channel's awareness and satisfaction in Taipei, 15.6% respondents have watched local channel. 64.7% of 520 respondents who have watched local channel show their satisfaction.

#### VII. Cable TV digitalization and overall satisfaction in Taipei

In according with 3,318 subscribers, 39.6% rank first which set one digital set-up box, which falls 16.2% as compared to the counterpart in the year 2016 survey results. On the contrary, interviewers set two set-top boxes increase 8.3% as compared to the counterpart in the year 2016 results.

Besides, in according with interviewers setting digital set-up boxes, 74.2% subscribers feel the on-site explanation clear, and 72.7% feel convenient using remote control. In additional functions usage in set-up boxes, 99.4% use digital channels, and 4.1% use video function, and 3.4% use on-demand videos. The result indicates with promising additional services, subscribers now still merely watch programs via digital cable TV. 7.0% say that they had experiences paying for additional service.

For overall satisfaction about the quality of service, 66.0% are satisfied with the quality of service overall, while 14.1% hold that Cable TV system operators in the city have the potential to rectify their service overall.

## VIII. Tiered pricing policy of Cable TV

58.5% agree with tiered pricing policy of cable TV. The subscribers of Liguan, 63.3% rank first which agree with tiered pricing policy of cable TV, 62.0% are the subscribers of YMS ranking second, and 61.6% are the subscribers of DAWS.

The majority are willing to pay NT300~NT399 per month (20.6%), with 18.3% willing to pay NT200~NT299 per month, and 15.1% could accept NT199 or less. 26.0% say they would like to purchase additional payment channel groups, 63.4% are merely willing to purchase the basic channels, without additional payment channel groups. The respondents are willing to pay additional package channels in NT199 or less (45.1%), with 18.6% willing to pay NT200~NT299 per month, while 6.3% accepting pricing NT300~NT399 per month.

## IX. Over-The-Top (OTT) Applications and Services

Regarding OTT users of audio and video contents, 64.3% use YouTube which ranked first, 23.3% use IQIYI which ranked second, and 19.3% use LINE TV. About the genre rank on OTT, movies rank first (55.5%), drama rank second (53.8%), news rank third (37.0%) and the following is the genre of variety (35.2%). About 29.5% spend 2 hours ~ nearly 3 hours on watching OTT contents by the respondents per day, which occupies the highest portion. Respondents spend less than an hour rank second (26.0%).

Regarding watching the Pay-OTT contents, 21.6% have watched Pay-OTT audio and video contents. Besides, 30.3% show that they would probably cancel their subscription to Cable TV and use OTT to watch video and audio contents, while 69.7% show that they would not cancel their subscription to Cable TV, but use only OTT to watch video and audio contents within one year. For replying to the questions of further situations of future use of OTT, 30.0% show that they would cancel Cable TV and use OTT only to watch video and audio contents and 70.0% show that they wouldn't cancel Cable TV but only watch video and audio contents on OTT.

By cross analyzing above two OTT questions to 10 Cable TV providers, most subscribers of Wanxiang company watch video and audio contents on IQIYI, while subscribers of the other 9 Cable TV providers watch video and audio contents on YouTube the most. In responding to their will to cancel Cable TV and use only OTT for

videos and audio, except for 50.4% of Taipei Net subscribers who show positive replies, more than 49.6% of its subscribers show negative. A larger portion of the other Cable TV subscribers show they wouldn't cancel Cable TV. In the aspect of those subscribers who will cancel Cable TV, the percentage ranking order follows Taipei NET, Jin Channel, Yangmingshan, Lianwei. Above percentages of the statistics are over 40%. Due to the fact that the number of the sampling respondents was less than 30 individuals, the results of the survey are only used as reference.

## X. Gender Analysis

This research overall doesn't display statistical significance difference in gender. However, following users' experiences show differences such as in aspect of program quality and viewing satisfaction revealing that women (49.2%) are much more satisfied than men (46.2%). Regarding replaying programs, men (65.2%) consider much more frequent than women (60.1%). Regarding channel quantity, men (50.5%) consider much more numerous than women (43.1%).

Regarding reasons phoning customer services, men phone because of paying bills problem while women phone because of manipulation problems or breakdowns in set-top boxes. There is statistical significance difference in viewing genres in gender. Men watch variety while women watch drama.

## XI. Suggestions

Taipei City government created more business opportunities in the Cable TV service market to welcome the new providers and gave their TV subscribers different options for Cable TV installation. Due to the marketing strategies adapted by the new providers, such as low-price competition and value service package, the TV subscribers will cancel the original Cable services and sign new contracts with new Cable service providers. In order to avoid consumer disputes, such as discrepancies between the advertisements and the actual contents, payment disputes, bad service quality or contract disputes, etc. it's suggested that the government departments should be aware of the consumers disputes and plan solutions ahead accordingly to protect the interests and rights of consumers.

The Public access channel can be the bridge for media access, although the percentage of Taipei citizens watching programs on public access channel remains low. It's suggested that Taipei Cable TV providers can be a joint venture with the channel owners regarding the promotion of introducing and explaining the purposes of public channels. Cable TV system operators have public access channel where the universities, colleges, and community universities can become partners providing graduating students, students majoring in film and television-related departments, retired teachers, and new residents to demonstrate their works and have it broadcast on public access channel. Or, the Cable TV providers can be integrated into the i-voting activity held by the Department of Civil Affairs of Taipei City Government. Therefore, the citizens can directly participate in the discussion of the future development of Cable TV, so as to boost the view rate of public channels. On the other hand, public access channel can be the media of live broadcasts on the discussion of the public issues to attract citizens' attention. The subscribers have pleaded for the improvements of Cable wires, and the government is suggested to conduct an overall examination on the existing wire problems and offer solutions for enhancing the overall city landscapes and reducing the risks of citizens exposed to public danger. Moreover, in response to the NCC policy concerning the development of the digitalization, the Cable TV providers are suggested to progressively offer renewal of the Cable TV set-up boxes and value packages, and the government is also suggested to strengthen the promotion of digitalization for achieving the goal in the shortest time. At the same time, the providers should keep the stability of the signal transmission during the process of digitalization. On the other hand, the service qualities, such as speed in answer, the service attitude of maintenance technicians, and the program quality are items requiring consistent concerns and enhancement to promote the overall satisfaction of the citizens.

On the promotional basis about Tiered pricing policy of Cable TV, the government is expected to become the communication bridge among the citizens, business owners and NCC, and reflect the real situation for the NCC's reference. The business owners should provide a variety of services in response to the changes of the overall TV viewing environment.