

# HIGHLIGHTS OF THE YEAR

年度匯聚



## Highlights of the Year

HKIRC is committed to serving the Internet community, promoting the use of the .hk domain name across different sectors, and fostering an inclusive digital community. To these ends, HKIRC held a number of activities and initiatives for holders of .hk and .香港 domain names during the year.

### 2018 Digital Market Place Seminar – “Mobile Payment: Digital Transformation from Customers to Merchants”

This, the 10th Digital Market Place Seminar, was held on 30 August 2018. Taking the theme “Mobile Payment: Digital Transformation from Customers to Merchants”, the seminar discussed the impact of mobile payment on the lifestyles of consumers and the business models of merchants, and explored the challenges and opportunities arising from the spread of mobile payment options.

The seminar brought together invited experts from Cyberport, PwC China, HKT Payment, Octopus, Boutir, Ztore, One2Paid, ASTRI and the Hong Kong Police Force. The speakers shared interesting user-cases from different industry sectors with over 400 participants, who had gathered to obtain first-hand and up-to-date insights into mobile payment technologies.

### Digital Market Place Survey – “Mobile Payment: Digital Transformation from Customers to Merchants”

In July 2018, Internet Society Hong Kong was commissioned by HKIRC to conduct an online survey exploring the market prospects for electronic mobile payment in Hong Kong, which included gathering details of public perceptions of mobile payment and user behaviour and experience. We collected 1,200 responses from local residents, over 80% of whom are mobile payment users.

This survey revealed that mobile payment is gradually gaining popularity in Hong Kong. It also affirmed the public’s confidence in the future of mobile payment for Hong Kong, while also registering their concerns about issues of network security and the abuse of personal data.

## 年度匯聚

HKIRC致力服務互聯網社群，推動不同界別使用 .hk 域名，並培養數碼共融社群。就此而言，HKIRC於年內為 .hk 及 .香港域名持有人舉辦多項活動及舉措。

### 2018年數碼市場研討會－「流動電子支付：從顧客至商戶的電子轉型」

第10屆數碼市場研討會於2018年8月30日舉行。該研討會以「流動電子支付：從顧客至商戶的電子轉型」為主題，討論流動電子支付對顧客生活方式及商戶商業模式的影響，並探討流動電子支付方式的普及所產生的挑戰及機遇。

該研討會雲集來自數碼港、普華永道中國、HKT Payment、八達通、掌舖、士多、雲到付、香港應用科技研究院及香港警務處等機構的專家。講者與大家分享來自不同行業的有趣用戶個案。研討會匯聚了超過400名與會人士，大家均期望獲得流動電子支付科技的第一手資料及最新見識。

### 數碼市場調查－「流動電子支付：從顧客至商戶的電子轉型」

於2018年7月，HKIRC委託香港互聯網協會以網上問卷形式進行調查，以了解香港流動電子支付的市場前景，其中包括收集市民對流動電子支付的接受程度、使用習慣及用戶體驗等詳情。我們收集了本地市民共1,200份問卷，其中八成以上為流動電子支付用戶。

該調查顯示流動電子支付在香港逐漸普及。調查亦肯定了市民對香港未來採用流動電子支付充滿信心，惟受訪者對網絡安全問題及個人資料濫用亦存在憂慮。

## Key Milestones of HKIRC in 2018 HKIRC 2018年關鍵里程碑

### March

- Sixth Best Registrar Award Presentation  
第六屆最佳註冊服務商頒獎典禮
- Web Accessibility Recognition Scheme 2018 Launch Ceremony  
無障礙網頁嘉許計劃2018啟動禮



### May

- Annual General Meeting 2018  
週年大會2018
- DNSSEC Safer Internet Communications for All Kick-Off Ceremony  
DNSSEC - 共建安全網絡啟動儀式



### June

- Web Accessibility Recognition Scheme 18/19 1st Award Presentation Ceremony  
無障礙網頁嘉許計劃 18/19 首階段頒獎禮



### August

- Digital Marketplace Seminar  
數碼市場研討會





## August

- “Mobile Payment: Digital Transformation from Customers to Merchants” Survey

「流動電子支付：從顧客至商戶的電子轉型」調查結果公佈



## October

- Root KSK Rollover Successfully Completed  
根區域密鑰簽名密鑰成功轉換



## December

- .hk Members' Event  
.hk 會員聚會



## Mobile Payment – Digital Transformation from Customers to Merchants

Mobile payment is changing the world. While it offers new opportunities for customers and merchants, what does the public think about mobile payment? The key findings from our survey are:

## 流動電子支付 – 從顧客至商戶的電子轉型

流動電子支付(流動支付)正在改變世界。雖然它為顧客和商戶提供了不少新機會，但公眾對流動支付的想法是什麼？我們的調查結果得出以下結論：

### Usage on Mobile Payment 流動支付的應用

**Mobile Payment is the Trend Now**  
流動支付是現今趨勢



**74%**

of the respondents believe mobile payment is the trend now  
受訪者認為流動支付是現今趨勢

**Mobile Payment Can Replace Cash/Credit Cards**  
流動支付可以取代現金/信用卡



**50%**

of the respondents indicate that mobile payment can replace cash / credit cards  
受訪者表示流動支付可以取代現金/信用卡



**84%**

of the respondents have used mobile payment before  
受訪者曾經使用流動支付



**93%**

of the respondents of age 18-25 have used mobile payment before  
18-25歲的受訪者曾經使用流動支付



**77%**

of the respondents of age 56-65 have used mobile payment before  
56-65歲的受訪者曾經使用流動支付

According to the survey findings, there is no direct correlation between income, education, and occupation on the mobile payment usage.

根據調查數據顯示，收入水平、教育程度和職業對使用流動支付並無直接關係。

### Top 3 Payment Methods 首三個受歡迎的付款方式



**37%**

Credit Card  
信用卡



**25%**

Octopus Card  
八達通



**23%**

Mobile Payment  
手機支付

## Participation in Mobile Payment 流動支付的參與

### Top 3 Places Where Mobile Payment is Used 首三個常使用流動支付的地方



Retail /Physical Store  
零售／實體店



Online Shopping  
網上購物



Dining  
餐飲

### Top 3 Areas Where Respondents Wish to Use Mobile Payment in the Future 首三個希望接受流動支付的地方



Public Transport  
公共交通

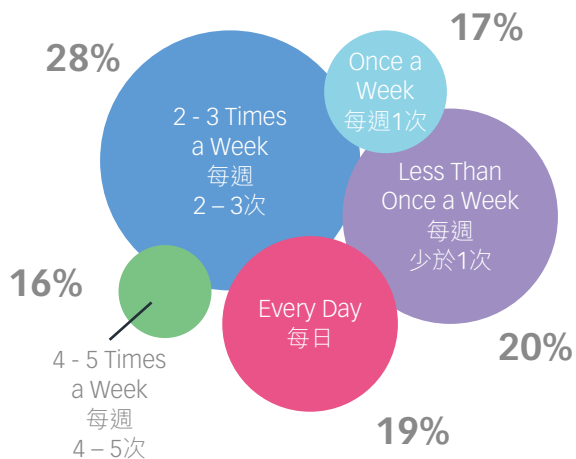


Government Bill  
政府帳單



Clinic  
診所

### Mobile Payment Usage Frequency (in weekly expenses) 每週使用流動支付的次數



### Money Spent on Mobile Payment 每次使用流動支付的金額

88%  
<\$500



8%

\$500-\$1000



## Reasons to Use / Not to Use Mobile Payment 使用/不使用流動支付的原因

### Hesitation on Mobile Payment? 對流動支付存有猶豫？



53%

of the respondents indicate they have  
hesitation about using mobile payment  
受訪者表示他們對使用流動支付存有猶豫



47%

of the respondents indicate they have no  
hesitation about using mobile payment  
受訪者表示他們對使用流動支付毫不猶豫

Respondents who indicated that they have no hesitation about using mobile payment think “the transaction amount is small enough to ignore the risks associated”.  
對使用流動支付表示毫不猶豫的受訪者認為「交易金額尚小所以風險可以接受」。

### Top 3 Reasons for Using Mobile Payment 首三個使用流動支付的原因



Discount Offers  
折扣優惠



Convenient  
方便



Efficient  
效率

### Top 3 Hesitations for Mobile Payment 首三個對使用流動支付感到猶豫的原因



Privacy Risk / Insecurity  
私隱風險/ 不安全



Most Merchants Do Not  
Support Mobile Payment  
大部份商戶並不支援流動支付



The Platform is Unstable  
支付平台不穩定

## Views on Development & Policies of Mobile Payment

### 公眾對流動支付發展與政策的看法

#### Policy on Mobile Payment 流動支付政策



83%

of the respondents indicate that the HK Government should launch more policies on e-wallet and mobile payment  
受訪者表示香港政府應推行更多有關電子錢包和流動支付的政策

#### Future Development of Mobile Payment 流動支付的未來發展



68%

of the respondents hold a favorable opinion on the future of mobile payment in HK  
受訪者對香港流動支付的未來發展表示支持

#### Big Brands & Corporates to Provide Mobile Payment? 企業和大品牌提供流動支付？



69%

favor  
支持



29%

neutral  
沒有意見



2%

do not favor  
不支持

#### Top 3 Related Policies HK Government Should Launch 首三個香港政府應推出的流動支付政策



Enhance security, reliability & trustworthiness of mobile payment providers  
加強流動支付供應商的  
安全、可靠和信用性



Limit the usage of personal data collected via mobile payment  
限制使用通過流動支付  
收集的個人數據



Impose severe penalty on cyber crime  
對網絡犯罪施以嚴厲處罰

Though most respondents are still using traditional payment methods, they do support mobile payment. While respondents are confident in the future development of HK mobile payment, both network security and the abuse of personal data usage should be addressed.

儘管大多數受訪者仍在使用傳統的支付方式，他們也表示支持使用流動支付。雖然受訪者對香港未來流動支付發展有信心，但也需要解決公眾對流動支付服務供應商的網絡保安措施及會否濫用個人資料的憂慮。



## Launch of Domain Name System Security Extensions (“DNSSEC”)

HKIRC announced the launch of Domain Name System Security Extensions (“DNSSEC”) at the “DNSSEC Safer Internet Communication for All” kick-off Ceremony, held on 28 May 2018. A number of Internet security specialists and other industry experts were invited to share their views and insights on the topic at the kick-off ceremony. DNSSEC provides an extra layer of security that is improving the reliability, trustworthiness, and quality of DNS, as well as safeguarding the online environment and strengthening public trust in the Internet.

The Root Zone Key Signing Key (“KSK”) was also changed by ICANN in Oct 2018, giving extra protection to the DNSSEC.

As of 13 January 2019, Hong Kong’s DNSSEC validation rate stood at 54%, much higher than other countries in the Asia-Pacific region:

Source: APNIC labs statistics

Hong Kong	54%
Singapore	19.12%
Japan	9.82%
South Korea	2.66%
China	1.28%

## Corporate Development IT System Advancement

As the custodian of critical Internet infrastructure in Hong Kong, it is essential that HKIRC remains at the forefront of developments relating to the Internet domain name system. HKIRC is committed to doing this by providing the latest high-quality professional services to all .hk and .香港 domain holders. In 2018, we continue to invest in our existing IT infrastructure to further enhance our service quality, security, stability and performance, including investment in deploying DNSSEC, upgrading networks and systems, and more.

## 推出安全網域名稱系統(DNSSEC)

HKIRC於2018年5月28日舉行的「DNSSEC－共建安全網絡」啟動儀式上宣佈推出安全網域名稱系統(DNSSEC)。眾多互聯網安全專家及其他行業專家應邀出席啟動儀式，分享他們對有關主題的觀點及見解。DNSSEC提供額外的安全層，增強域名系統的可靠性、可信賴性及質量，亦保障網上環境及加強公眾對互聯網的信任。

ICANN於2018年10月變更根區域簽名密鑰(KSK)，為DNSSEC提供額外保障。

於2019年1月13日，香港的DNSSEC驗證率為54%，遠高於亞太地區其他國家：

資料來源：亞太網絡資訊中心實驗室統計數據

香港	54%
新加坡	19.12%
日本	9.82%
南韓	2.66%
中國	1.28%

## 企業發展 資訊科技系統推陳出新

作為掌管香港互聯網基建網絡的機構，HKIRC須走在互聯網域名系統發展的前端。HKIRC致力繼續向所有 .hk 及 .香港域名持有人提供優質及專業的服務。於2018年，我們繼續投資在現有的資訊科技基建，進一步提升服務質量、安全性、穩定性及表現，包括啟用DNSSEC、提升網絡及系統等。

## Community Project Web Accessibility Recognition Scheme

With the aim of recognising local enterprises and organisations that adopt accessibility design in their websites and mobile applications, the Web Accessibility Recognition Scheme 2018 (“WARS”) was set up by HKIRC, with the Office of the Government Chief Information Officer (“OGCIO”) acting as co-organiser and the Equal Opportunities Commission (“EOC”) as independent advisor. The scheme was launched in March, and two award presentation ceremonies were held in June 2018 and January 2019. Not only do good web accessibility design practices make online services easier to maintain, they also contribute to narrowing the digital divide between those with special needs and the general public, thus helping build a caring and inclusive society.

## iStudent Programme

HKIRC launched the iStudent Programme in 2018 to promote the use of .hk domain names and encourage appropriate use of the Internet among Hong Kong’s younger generation. We are currently working with 10 schools in Hong Kong, sponsoring free .idv.hk domain names for 3 years for local students. Some schools are now incorporating website building into their ICT curriculum, while some are encouraging their students to create their own personal online presences as a way of expressing themselves and unlocking their creativity.

## HKIRC Members Gathering

The HKIRC Member Gathering was held on 6 December 2018, to thank .hk members for their support through the years. The gathering brought together .hk members, cyber security experts, and industry professionals to share industry insights in a relaxed atmosphere. Special thanks are due to the Cyber Security and Technology Crime Bureau of the Hong Kong Police Force, whose speakers took the time to share with our members details of cybercrime cases and cybercrime prevention strategies.

## Staff Enrichment

HKIRC is devoted to fostering a positive workplace environment for its valued staff. To this end, we held staff enrichment activities, staff gatherings and training in skills enhancement and inter-departmental communication and connection throughout the year. Having employees who are engaged with the company enables HKIRC to thrive, and these opportunities were designed to help our staff build greater awareness of their strengths, construct clear development goals, and develop strong and lasting professional relationships.

## 社群項目 無障礙網頁嘉許計劃

HKIRC設立2018年無障礙網頁嘉許計劃(WARS)，旨在表揚於網站及流動應用程式中採用無障礙設計的本地企業及組織，政府資訊科技總監辦公室(OGCIO)及平等機會委員會(EOC)分別擔任合辦人及獨立顧問。該計劃於3月推出，並於2018年6月及2019年1月舉行兩次頒獎典禮。實踐良好的無障礙網頁設計不僅簡化網絡服務管理，亦有助消除有特殊需要人士與一般大眾之間的數碼鴻溝，從而協助建立關懷共融的社會。

## iStudent計劃

HKIRC在2018年推出iStudent計劃，旨在向香港年輕一代推廣使用 .hk 域名及鼓勵互聯網的適當運用。我們現時與香港10間學校合作，資助本地學生3年免費使用 .idv.hk 域名。有些學校現正將建立網站納入其資訊科技及通訊(ICT)課程，有些學校則鼓勵學生創建個人網上平台，以表達自己的意見及發揮創造力。

## HKIRC成員聚會

HKIRC成員聚會於2018年12月6日舉行，以感謝 .hk 成員多年以來的支持。 .hk 成員、網絡安全專家及行業專家在輕鬆的氣氛下和HKIRC會員分享行業見識。特別感謝香港警務處網絡安全及科技罪案調查科，其講者撥冗與我們的成員詳細分享各種網絡罪案及網絡犯罪的預防策略。

## 員工能力提升

HKIRC致力為其優秀員工營造良好的工作環境。為此，我們於年內舉行員工能力提升活動、員工聚會及技能培訓以及加強跨部門溝通及聯繫。員工多參與公司事務可令HKIRC茁壯成長，且有助員工加強瞭解對自身能力的認識，建立清晰的發展目標及培植出穩固而持久的專業關係。

## Industry Engagement and Recognition

Two members of our management team received Bronze and Merit Awards respectively in the Online Services Providers section of the Cyber Security Professionals Awards.

The Cyber Security Professionals Awards are co-organised by the Hong Kong Police Force, the Government Computer Emergency Response Team Hong Kong and the Hong Kong Computer Emergency Response Team Coordination Centre. The awards bring together and recognise the cyber security experience and good practices of various organisations from major Hong Kong industry sectors, including Banking & Finance, Communications, Government & Public Bodies, Transportation & Public Utilities and Online Services Providers, all dedicated to jointly tackling cyber threats.

## Expert Knowledge Sharing

HKIRC participated in various speaking opportunities throughout 2018 to share the company's views on Internet security risks with regard to domain names, and to promote greater awareness of DNS and web security issues. These events included CloudAsia Expo, the Data & Cloud Tech Summit and the Security Awareness Seminar, among others. HKIRC was also invited to take part in a press conference hosted by the Association of I.T. Leaders in Education ("AiTLE").

## Regional and International Co-operation

To remain at the forefront of its industry, HKIRC participates regularly in regional and international forums related to the domain name system.

- **ICANN**

The Internet Corporation for Assigned Names and Numbers ("ICANN") is a non-profit-making multi-stakeholder organisation headquartered in Los Angeles. Its primary mission is to maintain the security and stability of the Internet Protocol addressing and Internet domain name system, and to administer the allocation of Internet Protocol addresses and top-level domains. HKIRC sent a delegate to the ICANN meeting held in Barcelona in October 2018. HKIRC staff also participated in various ICANN working groups, such as ccNSO (the Country Code Names Supporting Organization).

## 行業參與及認可

我們管理團隊的兩名成員分別於網絡安全精英嘉許計劃中獲頒網絡服務供應商組別銅獎及優異獎。

網絡安全精英嘉許計劃由香港警務處、政府電腦保安事故協調中心及香港電腦保安事故協調中心合辦。該嘉許計劃匯聚香港多個主要界別，包括銀行及金融、通訊、政府及公營機構、運輸及公共事業和網絡服務供應商，嘉許大家於網絡安全的經驗及優良實踐，這些界別均致力處理網絡安全的威脅。

## 專業知識分享

HKIRC於2018年屢獲邀請出席科技會議，分享其對互聯網域名安全風險的意見，並推廣大家對安全網域名稱及網頁安全議題的認知度。該等會議包括CloudAsia Expo、Data & Cloud Tech Summit及Security Awareness Seminar。HKIRC亦獲邀參加資訊科技教育領袖協會(AiTLE)所舉辦的新聞發佈會。

## 地區及國際合作

為維持在行業的領先位置，HKIRC定期參與有關域名系統的區域及國際論壇。

- **ICANN**

互聯網域名及規約編號分配組織(ICANN)，總部設於洛杉磯，為一家非牟利機構，其成員包括多方持份者。ICANN的主要使命是維護互聯網規約地址(IP Address)及域名系統的穩定及安全運作，以及編配互聯網規約地址及頂級域名等工作。於2018年10月，HKIRC派出代表出席在巴塞隆納舉行的ICANN會議。HKIRC員工亦有參加各種ICANN工作小組，如ccNSO(國家域名支持組織)。

• **CDNC**

The Chinese Domain Name Consortium (“CDNC”) is an independent non-profit organisation set up to facilitate communication and coordination regarding the technical standards and policies of the Chinese Domain Name System. It was founded in 2000 by CNNIC (the China Internet Network Information Centre), TWNIC (the Taiwan Network Information Centre), HKIRC, and MONIC (the Macao Network Information Centre). With the help of language experts in Hong Kong, Taiwan and mainland China, more and more Hong Kong characters are being made available for domain registration. Moreover, the concerted efforts of CDNC members are resulting in more and more email servers around the world now being able to work with email addresses in the Chinese language. Although there is still a long way to go before all email servers globally can support Chinese email addresses, CDNC members will continue to work together to promote the adoption of Chinese domain names around the world. HKIRC attended the two CDNC meetings held in Beijing in April and October 2018.

• **APTLD**

The Asia Pacific Top Level Domain Association (“APTLD”) is a regional body consisting of ccTLD managers in the Asia Pacific region. Its mission is to facilitate the exchange of knowledge and experience to help ccTLD managers achieve world-class best practices. HKIRC has been continuously supporting part of the secretariat work relating to APTLD. Delegates from HKIRC attended the APTLD meetings in Kathmandu and Tashkent held in February and September 2018 respectively.

• **APIRA**

The Asia Pacific Internet Research Alliance (“APIRA”) is a non-profit organisation aimed at enhancing communication about Internet information across the Asia Pacific region, as well as expanding research on statistical techniques relating to Internet information, and facilitating cooperation among Asia-Pacific countries and regions regarding Internet information. Its members include CNNIC, the Korea Internet Security Agency (“KISA”), TWNIC, the Malaysian Communications and Multimedia Commission (“MCMC”), the Macao Association for Internet Research, City University of Hong Kong, and the University of Macau. HKIRC attended the APIRA meeting held in Macau in November 2018, where it shared the results of a survey on the mobile payment situation in Hong Kong.

• **CDNC**

中文域名協調聯合會(CDNC)是一家獨立及非牟利組織，旨在促進中文域名系統技術標準和有關的措施和溝通。聯合會由CNNIC(中國互聯網絡信息中心)、TWNIC(財團法人台灣網路資訊中心)、HKIRC及MONIC(澳門互聯網絡資訊中心)於2000年共同成立。在香港、台灣及中國內地語言專家的幫助下，越來越多的香港字符獲應用於域名註冊。此外，在CDNC成員的共同努力下，全球越來越多的電郵伺服器如今可以使用中文電郵地址。儘管讓全球所有電郵伺服器都支持中文電郵地址，仍舊長路漫漫，但CDNC成員將繼續努力推動全球採用中文域名。HKIRC出席了2018年4月及10月在北京舉行的兩次CDNC會議。

• **APTLD**

亞太區頂級域名組織(APTLD)為一家區域性組織，其成員來自亞太區的ccTLD管理層。APTLD的使命是促進區內ccTLD管理者的知識及經驗交流，以達至世界級的管理水平。HKIRC亦有一直支持有關APTLD的秘書處工作。於2018年2月及9月，HKIRC分別派代表出席了在加德滿都及塔什干舉行的APTLD會議。

• **APIRA**

亞太區互聯網研究聯盟(APIRA)為一家非牟利組織，旨在提升亞太區互聯網資訊的溝通，以及擴大有關互聯網資訊統計數據技術的研究，並促進亞太國家及地區間互聯網資訊的協調。APIRA成員包括CNNIC、韓國互聯網振興院(KISA)、TWNIC、馬來西亞通訊及多媒體委員會(MCMC)、澳門互聯網研究學會、香港城市大學及澳門大學。於2018年11月，HKIRC出席了在澳門舉行的APIRA會議，於會上分享了香港流動電子支付情況的調查結果。



## Sponsorships and Support for Other Industry Events

HKIRC was the promotion partner of the International ICT Expo for the fourth year in 2018, and of the SmartBiz Expo for the second year. Both of these were organised by the Hong Kong Trade Development Council (HKTDC). At each, we set up booths to promote .hk domain names to local SMEs. HKIRC was also invited to act as promotion partner for the Cloud Expo Asia, and set up a booth there to promote .hk to IT experts.

## 贊助和支持其他業界活動

2018年，HKIRC擔任「國際資訊科技展覽」的合作推廣夥伴及「創智營商博覽」的贊助商，「國際資訊科技展覽」已是HKIRC第四年參與，而「創智營商博覽」則第二次參加。兩項活動均由香港貿易發展局舉辦。我們在各活動中都設置攤位，向本地中小企業推廣 .hk 域名。HKIRC亦獲邀擔任香港亞太雲端科技博覽的合作推廣夥伴，並於當中設置一個攤位，向資訊科技專家推廣 .hk 的優勢。