

## ANNUAL REPORT 2016 NATIONAL CREDIT CARD CENTER 駐團聯合信用卡氛理中心

www.nccc.com.tw

## **ANNUAL REPORT 2016**

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## Preface

ANNUAL REPORT 2016 NATIONAL CREDIT CARD CENTER



In 2016, the global economic growth remained steady at 2.4% despite the unexpected significant events happening including Brexit, US presidential election and China's economy slowing down caused economic turbulences worldwide. And, the Taiwan's economic performances also showed a gradual upward trend. According to release by the Directorate-General of Budget, Accounting & Statistics, Executive Yuan, ROC, Taiwan's GDP growth rate was 1.4%; private consumption expenditure increased by nearly 2% in 2016. For Taiwan's credit card market, as at year-end 2016, the number of credit cards in circulation reached to 40.70 million, up 5.67%; the total credit card purchase amount for 2016 hit a record high of NTD2.42 trillion, up 8.53%, compared with the prior year. The continuing rise of these business performance indicators has been attributed to the facts of credit card chosen as first alternative payment tool besides cash by the Taiwan's consumers and credit card acceptance locations continually expanded year by year. The emerging of various innovations in payment technologies and supporting of the government in pushing ahead with electronic payments have also fueled to the stable growth of Taiwan's credit card market.

In accordance with the plan of "Double the PCE Percentage of Electronic Payments in 5 Years" set up by the government, NCCC launched "Credit Card Payment Platform for Public Agency Fee" in January 2016 allowing the general public to pay by credit card over the counters at public agencies. By the year end of 2016, the number of participating public agencies totaled 359 and the platform service was soon further extended to public hospitals. Meanwhile, NCCC initiated an operation mechanism of credit card served as an electronic invoice carrier in April 2016, providing a Gateway system for immediate transferring data stored on the credit card and identity verification as well as allowing cardholder enguiring transaction data and invoice printing out for receiving prize. In addition, to coordinate with the policy of "e-Tax Refunding for Purchase by Foreign Visitors" implemented by the National Taxation Bureau of Kaohsiung, Ministry of Finance, NCCC formally rolled out an operation system of tax refund by credit card in May 2016 enabling foreign visitors to experience a fast service of tax refund receiving.

To develop Fintech related businesses and to coordinate with the regulatory authority's policy of promoting international mobile payment businesses in Taiwan (e.g.: Apple Pay, Samsung Pay, Android Pay, etc.), NCCC, in 2016, completed establishment of domestic TSP and foreign TSP systems switching mechanism in view of acting as a role of providing services to NCCC card issuing members, integrating resources, eliminating repetitive investment costs and enhancing the whole industry's benefits. Furthermore, NCCC, in June 2016, obtained approval from the Financial Supervisory Commission

to engage in Electronic Stored Value Card Transaction Operation Platform service providing of ESV acquiring business expanding and terminal equipment sharing with ESV card issuers, which produces significant beneficial result for Taiwan's payment industry development.

Moreover, NCCC successfully launched a Credit Card Big Data Platform with outstanding performance achieved in Open Data according to the government policy in 2015. In 2016, NCCC continued to open the credit card purchase transaction data of 6 major industries and 6 metropolitan cities as well as 16 counties in Taiwan. And NCCC has begun releasing the Taiwan credit cardholders' consumption patterns every month since October 2016. The research and analysis reports are periodically updated on the NCCC's website and government open data platform for the free use of industries, government, academic sector and general public as well as for sharing the data open results. On top of that, NCCC's website was rated "Excellent" by the Financial Supervisory Commission in website performance evaluation on all its periphery institutions on 20 March 2016, and passed claim of conformance level A+ for "Handicap-free Web Accessibility Service" issued by National Communications Commission on 6 April 2016.

Looking ahead in 2017, NCCC shall continue promoting digital financial technology related businesses of virtual and physical payment integration, electronic wallet, cloud-based application of mobile payment, credit card big data platform, and so on, introducing innovations to credit card and committing itself to creating more various and convenient credit card payment applications for Taiwan's consumers. Also, to meet the society's needs and to fulfill corporate social responsibilities, NCCC shall continue to support concern-for-society activities and government policy promoting programs.

National Cardit Card Center

Chairman

7eng Cheng Liu



## Introduction to National Credit Card Center

# ANNUAL REPORT 2016 NATIONAL CREDIT CARD CENTER

Introduction to National Credit Card Center

#### **01** Introduction

The Center was first established as "National Debit Card Center" in 1983. In 1988, responding to the trend of financial liberalization and internationalization, the Ministry of Finance amended the "Regulations Governing Banks Conducting National Debit Card Business" and approved the issuance of credit card. Thus, the "National Debit Card" was transformed into "National Credit Card"; the Center's name was changed to "National Credit Card Center".

NCCC is a non-profit public interest entity and serves as a credit card domestic settlement and authorization switching center in accordance with the government policy. Also, NCCC establishes membership system that provides card issuing member institutions with centralized processing services including international credit card brand licensing and sponsorship, shared information system, as well as merchant network setup. With aim to promote the payment card industry development and to arrive at the goal of non-cash society in Taiwan, NCCC also strives to push forward innovative businesses for the payment card industry.

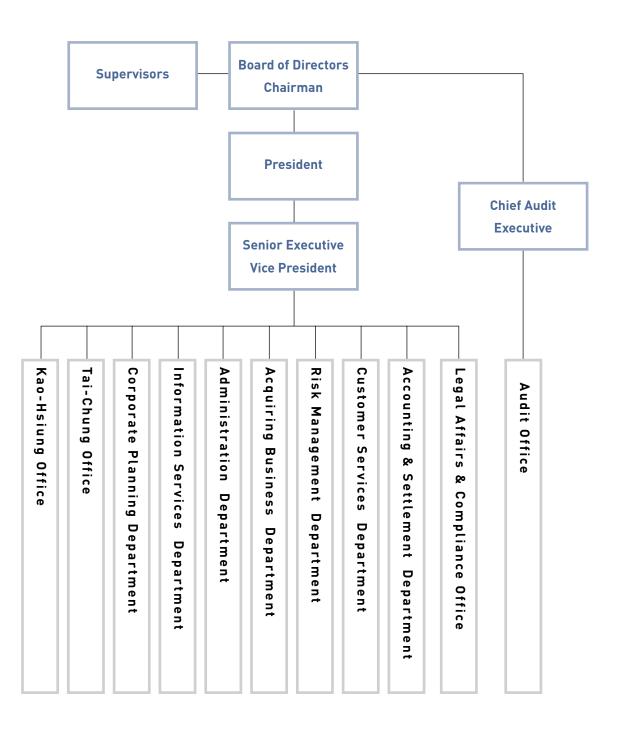
#### 02 History

- The Council for Economic Planning and Development, Executive Yuan, approved a "Proposal for Issuance of National Debit Card" in May 1979 and planned establishment of "National Debit Card Center" jointly formed by banks and investment & trust companies. And the Ministry of Finance called a meeting gathering the financial institutions to discuss the operating guidelines for National Debit Card.
- 1981 The Ministry of Finance promulgated the "Regulations Governing Banks Conducting National Debit Card Business", adopted policy of "one person one card /deposit first/ consumption afterwards", and called a meeting gathering 24 financial institutions including Central Trust of China to research into the debit card business.
- The National Debit Card Center was established and the domestic financial institutions started conducting debit card issuing business. The Center was engaged in handling centralized settlement processing and was committed to operate debit card acquiring business.
- Responding to the trend of financial liberalization and internationalization and to enhance the consumer convenience, the Ministry of Finance promulgated eliminating the limit of "one person one card", adding to the function of revolving credit, and approved the issuance of "credit card". Concurrently, the Center's name was changed to "National Credit Card Center".
- NCCC cooperating with Visa International introduced Visa Credit Card, and concurrently launched international credit card domestic settlement business.
- NCCC set up the Kaohsiung Branch Office in December 1989 as the credit card market continued expanding.
- NCCC partnered with MasterCard International and commenced MasterCard Credit Card issuing business as the credit card business continued growing.
- NCCC set up the Taichung Branch Office in July 1993 to meet business expansion need in the central area of Taiwan. •
- NCCC partnered with JCB International and introduced JCB Credit Card, providing another payment card choice for the general public in Taiwan. The Taiwan's credit card market has been vigorously growing since then.
- The credit card acquiring market was opened; NCCC member banks were allowed to conduct acquiring business themselves. Also, NCCC accepted the member banks' outsourcing of acquiring business.
- 1997NCCC cooperated with Visa International in establishing the first Internet credit card transaction environment in Chinese version in the world and setting up a "National Credit Card Center Worldwide Information Website" delivering the latest professional global payment card business knowledge.
- 2000 NCCC completed self-built credit card domestic settlement processing system.

- **2002** To coordinate with the government policy, NCCC set up various operation systems including "Individual Income Tax Payment by Credit Card", "Payments in Taipei e-services Online", as well as "Citizen's Travel Card Payment".
- **2004** To coordinate with the government policy, NCCC set up "A Common Operating Platform for Various Fee Payments in e-government Services".
- 2007 In making utmost efforts for protecting the information security of credit cardholders and merchants, NCCC implemented strict data control measures and obtained the ISO 27001 information security certificate in 2007.
- **2009** To be in line with the government cross-strait financial business policy, NCCC, approved by the regulatory authorities in 2009, conducted China UnionPay Card (including credit card and debit card) POS payment transaction authorization, settlement, and acquiring operations in Taiwan.
- **2010** NCCC obtained approval to engage in UnionPay Credit Card ATM cash advance transaction authorization and settlement processing services in Taiwan.
- **2011** NCCC became the first institution obtaining approval to engage in UnionPay Card Online Payment acquiring business in Taiwan.
- **2012** Faced with the trend of diversified development with transaction volume increasingly growing in the payment card industry, NCCC established a new computer workstation named "Ding Pu Data Center" at Ding Pu Hi-tech Square, Tu-Cheng, to enhance the computer workstation performance efficiency and to correspond with the energy-saving principle, which project was approved by the regulatory authorities. The new computer workstation, representing a milestone of NCCC's corporate sustainable development, completed construction and opened in 2012.
- **2013** To comply with the Personal Data Protection law requirements and strengthen the trusted relationship with clients, NCCC established internal control system for personal data protection. And NCCC obtained BS10012 Personal Information Management System Certification from the British Standards Institution in 2013 by which NCCC abides to fully carry out the information security and personal data protection measures.
- 2014 To build up Payment Service Provider Trusted Service Manager platform (PSP TSM) and maintain a stable and secure payment system, NCCC coordinated with Financial Information Service Co. and Taiwan Clearing House in jointly establishing Taiwan Mobile Payment Company that opened a new era for mobile payment industry in Taiwan.
- **2015** The NCCC Jhubei backup computer workstation located at a separate site from main office formally began operation. In accordance with the government policy, NCCC contributed to the "Financial Technology Development Fund" for supporting innovative FinTech service research and development as well as FinTech talent cultivation program.
- 2016 To support the goal of "Double the PCE Percentage of Electronic Payments in 5 Years" set by the regulatory authorities and to respond to the FinTech development trend of integrating virtual and physical applications, NCCC established "Credit Card Payment Platform for Public Agency Fee", created Credit Card Big Data platform and committed to promoting mobile payment and Internet payment businesses.

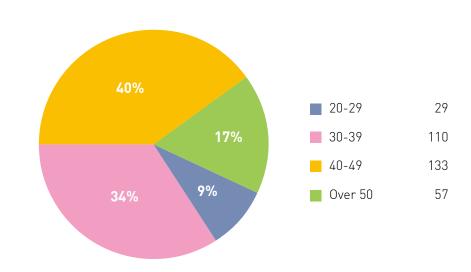
#### **03** Organization Structure

#### A • Organization Chart



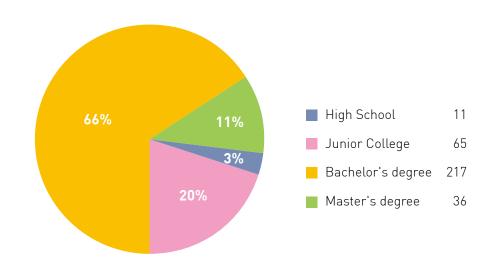
#### **B** • Employees

No. of Staff 329, Average age 41.50, Average years of service 14.78



#### Age Statistic

**Educational Background Statistic** 



#### C • The Executives of NCCC (at Year-end 2016)

Title	Name
President	Mr. Tong Liang Lin
Senior Executive Vice President	Mr. Hanover H.H. Chu
Senior Executive Vice President Executive Vice President Acquiring Business Development Dept.	Mr. Eric Hwang
Chief Audit Executive Audit Office	Mr. Charles Chiu
Executive Vice President Corporate Planning Dept.	Mr. Te-Ho Chen
Executive Vice President Accounting & Settlement Dept.	Ms. Carolyn Yao
Executive Vice President Customer Services Dept.	Mr. Kavin Lin
Executive Vice President Information Services Dept.	Ms. Christina Wang
Executive Vice President Administration Dept.	Ms. Carolyn Liu
Executive Vice President Risk Management Dept.	Mr. Leo Y. Lee
Compliance Officer Legal Affairs & Compliance Office	Ms. Angela Hsu
Branch Chief Kao-Hsiung Office	Mr. Shang-Chin Huang
Branch Chief Tai-Chung Office	Mr. James Hsu

#### **04** Directors / Supervisors (at Year-end 2016)

Title	Name
Chairman	Teng-Cheng Liu
Director	Tsu-Pei Chen
	Rong-Jou Wang Ching-Nain Tsai
	Chao-Shun Chang
	Thomas T.L. Wu
	Gary K.L. Tseng
	Thomas Chen
	Eric Chen
	Hsiang Yin Chen
	C-F Lin
	I-Cheng Liu
	Tong Liang Lin
Supervisor	Li-Yeh Yang
	C. W. Yang
	Frank Hsu

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Group photo of the 12th Board of Directors & Supervisors taken to mark the occasion on 19 January 2017

### Business Operations & Operating Results

# ANNUAL REPORT 2016 NATIONAL CREDIT CARD CENTER

## Business Operations & Operating Results

Credit Card Authorization Switching and Settlement Operation

#### A • Credit Card Authorization Switching Center Operation

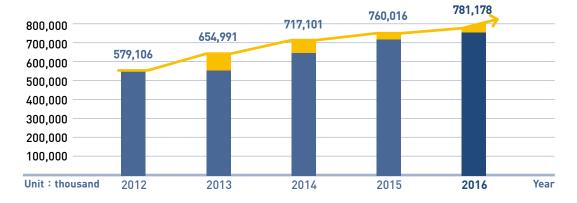
In response to request from the Ministry of Finance for integrating and establishing a credit card domestic authorization network, NCCC and Financial Information Service Co. jointly completed system link and set up a "hub of credit card authorization system link" in 2002. All the domestic credit card issuing and acquiring institutions may choose to link with either NCCC or FISC to switch and complete the transactions through the hub of authorization system link. By doing so, we have achieved the government's policy goal of "Taiwan-issued international credit cards complete transaction authorization processing inside of the country when used in Taiwan". Meanwhile, for the transactions made outside of Taiwan by NCCC member-issued credit cards and the transactions made inside of Taiwan by foreign-issued credit cards acquired by NCCC members, NCCC acts on behalf of members to switch the authorization messages through connecting with the interface of the international credit card associations.

#### **Business Scope**

1 S To handle inter-bank credit card authorization switching transactions through the hub of authorization system link for Taiwan-issued credit cards (including magnetic-stripe card and chip card) that are used at domestic merchants (including brick-and-mortar, electronic commerce, mail order and TV order) and which transactions are processed via reading magnetic stripe, chip, or by RFID reader, or by manual operation. 2 S To process authorization switching for transactions made at merchants in foreign country by Taiwan-issued credit cards and transactions made at merchants in Taiwan by foreign-issued credit cards.

#### **Operating Results in 2016**

Number of Transactions: NCCC handled 781,178 thousand authorization switching transactions in 2016, an annual growth rate of 2.78%, compared to 760,016 thousand in 2015.



NATIONAL CREDIT CARD CENTER

#### **B** • Credit Card Authorization Switching Center Operation

NCCC, by obtaining the regulatory authorities' approval, engages in processing domestic credit card interchange & settlement operations, that is to handle the non-onus transactions acquired by all acquiring institutions, to consolidate and generate the settlement sum, to process settlement funds collecting and sending through "Central Bank of the Republic of China (Taiwan) Interbank Funds Transfer System". The business aims are as follows:

1 . To develop domestic credit card interchange & settlement operating regulations in accordance with the government policy.

2 . To handle domestic credit card inter-bank settlement so as to enhance transaction data security.

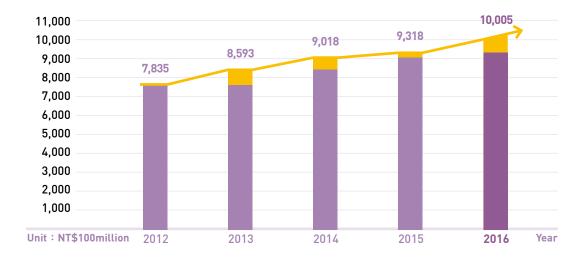
3 . To carry out the policy of "domestic transaction to be settled inside of the country" so as to increase operating efficiency.

#### **Business Scope**

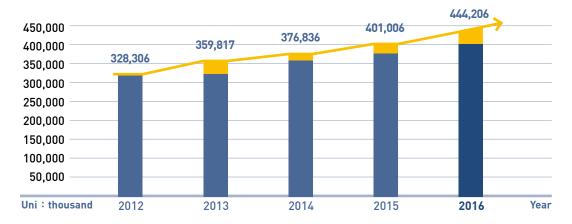
Domestic Interchange & Settlement processing includes credit card and debit card of U Card, VISA, MasterCard and JCB issued in Taiwan. The number of participating institutions totaled 40.

#### **Operating Results in 2016**

1 • Transaction Volume: The domestic settlement summed to NT\$1,000,500 million in 2016, up 7.37% compared to NT\$931,800 million in 2015, which is shown below :



2 . Transaction Numbers : The number of domestic settlement transactions totaled 444,206 thousand in 2016, up 10.77% compared to 401,006 thousand in 2015, which is shown below :



#### C • Domestic and International Transaction Settlement for NCCC Member-issued Credit Cards

NCCC is established as a member organization. To help members reduce operating costs, NCCC consolidates domestic and international transactions made by NCCC member-issued credit cards and handles settlement operation for the members. The operation effectiveness can be summarized as follows:

1 . To coordinate setting up a settlement system linking with the international credit card associations and processing transaction settlement for members.

2 . To provide centralized transaction processing service so as to reduce members' operating cost and improve operating efficienc °

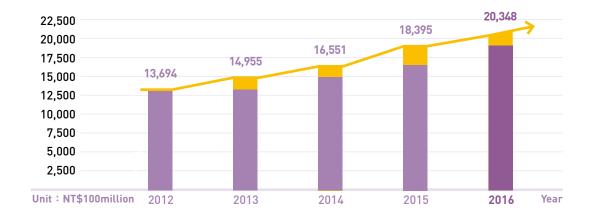
3 . To periodically provide business statistic data for members' reference in policy making.

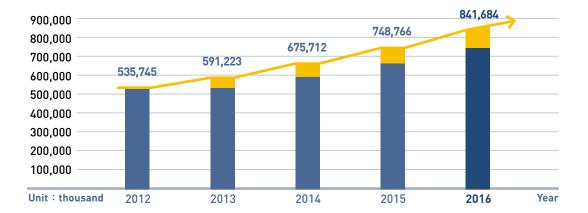
#### **Business Scope**

The NCCC member-issued cards include credit card and debit card of U Card, VISA, MasterCard and JCB. The number of participating institutions totaled 28.

#### **Operating Results in 2016**

1 · Transaction Volume: The total transaction amount was NT\$2,034,800 million in 2016, up 10.62% compared to NT\$1,839,500 million in 2015, which is shown below:





2 · Transaction Numbers : The total number of transactions totaled 841,684 thousand in 2016, up 12.41% compared to 748,766 thousand in 2015, which is shown below :

#### **02** Acquiring Operation

The acquiring operation related services include not only payment card transaction settlement for the merchants, but merchant recruitment, merchant credit evaluation, as well as card acceptance equipment installment, and so on.

When cardholders make transactions at NCCC merchants, NCCC acquires the sales receipts with transaction details, sends payment to merchants after deducting handling charge, and processes payment with each corresponding card issuing bank.

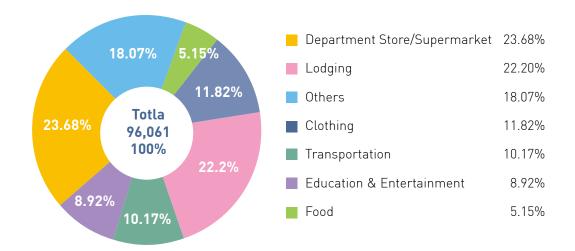
#### **Business Scope**

The NCCC acquiring operation includes credit card and debit card transactions of U Card, VISA, MasterCard, JCB and UnionPay. NCCC has also accepted acquiring service outsourcing from American Express International (Taiwan), Inc. to conduct certain acquiring operation services for American Express Card on behalf of Amex in Taiwan. In addition, NCCC has entered into an agreement with the Citibank Taiwan Ltd. for Diners Club Card to share NCCC's EDC terminal equipment.

#### **Operating Results in 2016**

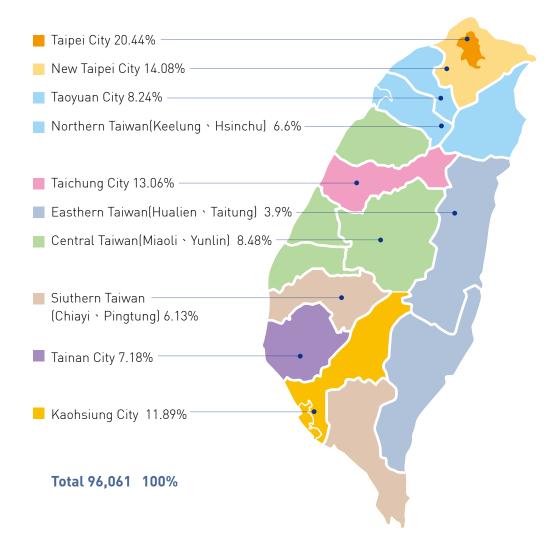
As at the year-end 2016, the number of NCCC merchants (including installment payment merchant locations) was 96,061, of that, Food 4,950, Clothing 11,351, Lodging 21,324, Transportation 9,766, Education & Entertainment 8,568, Department Store/ Supermarket 22,748, and Others 17,354. The percentage share of each merchant category is shown below:

#### A • NCCC Merchant Categories & Percentage of Shares



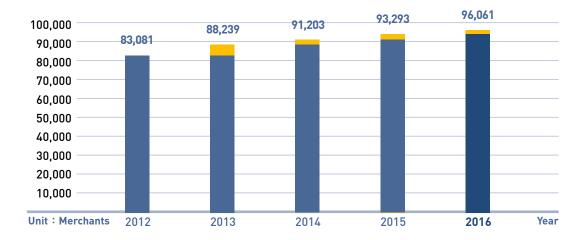
#### **B** • Network of NCCC Merchants

As at the year-end 2016, the number of NCCC merchants (including installment payment merchant locations) was 96,061, of that, Taipei City 19,637, New Taipei City 13,530, Taoyuan City 7,914, Taichung City 12,545, Tainan City 6,896, Kaohsiung City 11,423, Northern Taiwan 6,336, Central Taiwan 8,148, Southern Taiwan 5,884, and Eastern Taiwan 3,748. The percentage share of each city or county or area is shown below:



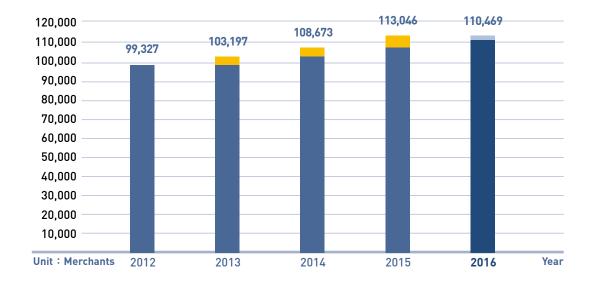
#### C • NCCC Merchant Base

As at the year-end 2016, the number of NCCC contracted merchants (including installment payment merchant locations) was 96,061, an increase of 2.97% versus the year-end 2015, which is shown below:



#### **D** • Number of Point of Sale Terminals

As at the year-end 2016, the number of NCCC's Point of Sale Terminals (including terminal owned by NCCC and purchased by merchant itself, and virtual terminal) was 110,469, an decrease of 2.28% versus the year-end 2015, which is shown below:



#### **13** NCCC Common Operating Platforms

#### A • Credit Card Issuing Business of NCCC Members

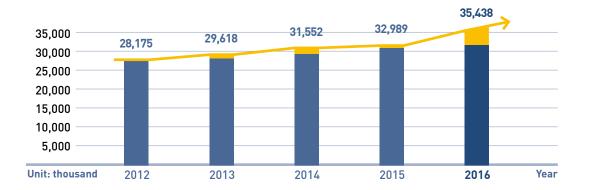
NCCC member institutions have issued U Card, Visa, MasterCard, and JCB cards. The card issuance continued expanding sharply in the wake of matured consumer banking environment, rising consumer demand, coupled with market promotion and cardholder solicitation by the NCCC member institutions. Until the recent years, the increase of cards issued has been slowing down, and the number of cards in circulation has been growing at a steady pace.

#### **Business Scope**

U Card, VISA, MasterCard, and JCB Card issued by NCCC member institutions.

#### **Operating Results in 2016**

Accumulated Number of Cards in Circulation: The total number of cards in circulation was 35,438 thousand in 2016, an annual growth rate of 7.42%, compared to 32,989 thousand in 2015. Number of cards in circulation refers to number of cards issued minus cards cancelled and the card accounts maintain a normal status.



#### **B** • Installment Payment Operating Platform

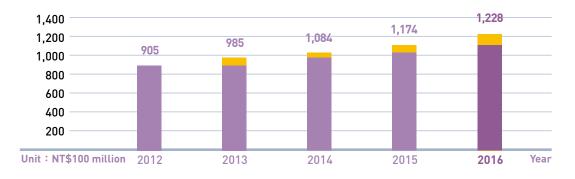
In response to the market needs, NCCC developed a common operating platform for both the card issuing institutions and their installment payment merchant partners in 2004. Those merchant partners who link to the NCCC platform system can provide online installment payment service function that allows the cardholders to pay off the transaction bill in several times for one transaction amount.

#### **Business Scope**

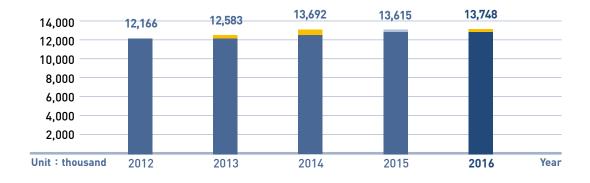
The installment payment operating platform service applies to those card issuing institutions and merchants who participate the platform.

#### **Operating Results in 2016**

1 · Transaction Volume : The total installment payment amount summed to NT\$122,800 million in 2016, increasing 4.6% compared to NT\$117,400 million in 2015, which is shown below:



2 Transaction Numbers : The total number of installment payments was 13,748 thousand in 2016, increasing 0.97% compared to 13,615 thousand in 2015, which is shown below: :



#### C • Credit Cardholders Online Transaction Authentication Service

To enhance credit card online transaction security and strengthen cardholder services, NCCC has implemented "Access Control Server (ACS) Authentication Service for Online Transaction Security" that enables the cardholders to make online purchase transactions in a more secure environment through identification enrollment and password verification processes. The Access Control Server (ACS) Authentication Service platform, passed examination by Visa designated qualified Security Assessor, provides a wide applied online transaction authentication system supporting 3 card brands of VISA Verified by Visa, MasterCard SecureCode and JCB J/Secure.

#### D • Credit Card Purchase Transaction Benefit Platform

To meet the market needs, NCCC created a credit card purchase transaction benefit platform in 2014, providing transaction benefit promotion program for the card issuing institutions and merchants. When the credit cardholders make purchase transactions at merchants, the transactions will be immediately checked against the benefit terms and be exchanged for the benefit via the platform and point of sale terminal, which can simplify operations, leverage marketing resources, and further increase customers along with sales volume. The credit card purchase transaction benefit platform service applies to those card issuing institutions and merchants who participate the platform.

#### E • Credit Card ATM Cash Advance

NCCC established a credit card cash advance network and has partnered with the participating institutions to provide ATM cash advance transaction service to the credit card holders. The cardholders can use credit cards of U Card, Visa, MasterCard, JCB, and AmEx to make cash advance transactions by entering password at those ATMs on which a "NCCNET Plum Blossom" sticker displayed (as below). The business scope includes the following:

1 • Domestic ATM cash advance transaction service on the NCCC value-added application platform.

- 2 · ATM transaction switching service for foreign Visa PLUS Card.
- 3 · ATM transaction switching service for foreign MasterCard Cirrus Card.



#### F • Bonus Point Accumulation & Redemption

NCCC created a bonus point accumulation and online redemption platform for the card issuing institutions. The participating merchants linked to the NCCNET POS network can provide online redemption function that enables the cardholders to immediately redeem the bonus points accumulated to the transaction amount when paying for purchase.

#### **G** • Government Fee Payment

To increase the penetration rate of electronic payments and to expand the credit card acceptance channels, NCCC established a "Credit Card Payment Platform for Public Agency Fee" allowing the general public to pay government bodies related fees and bills over the counters by credit card. The payment platform also applies to public hospital's related medical service fees (not including plastic surgery, postnatal nursing and physical examination). To provide more payment channels to the people, it is also planned to add online payment and mobile APP functions onto the platform; thus, enabling the general public to experience the convenience of mobile payments at various channels.

To coordinate with the government policy of bringing greater convenience to the people and to provide incremental service functions to the credit card issuers, NCCC has partnered with Chunghwa Telecom and motor vehicle administration bodies in providing the general public with fee payment services, where people can use credit card to pay school registration fee, public service related charges, motor vehicle administration fees and various types of taxes by obtaining transaction authorization via phone voice operating system or via Internet. The business scope includes the following:

1 · E-government service platform: including "school registration & miscellaneous fees" and "on-campus administration affairs fees" charged by all levels of schools as well as public service related fees charged by all levels of government bodies who participate on the e-government service platform.

2 Motor vehicle administration fee: including traffic violation fine, fuel fee, handling fee, license plate fee, license plate number selection charge, etc.

3 Various types of taxes: including payments of Individual Consolidated Income Tax, assessed tax, as well as business tax, etc.

#### **04** Fraud Prevention Operation

To monitor credit card frauds in retail transactions, NCCC has utilized prevention system with parameters preset and reporting mechanism as a monitoring tool to identify any abnormal activities and proceed with investigations. For those merchants who are verified violating merchant contract, NCCC will take actions of educating, or warning, or monitoring, or terminating merchant contract depending upon the violation extent. Also, NCCC, as the credit card fraud reporting center, provides a fraud transaction information reporting platform that consolidates information from credit card institutions and international associations and shares the information with each other to prevent exposure to fraud; thus, establishing an effectively risk controlled credit card transaction environment in Taiwan.

#### **Business Scope**

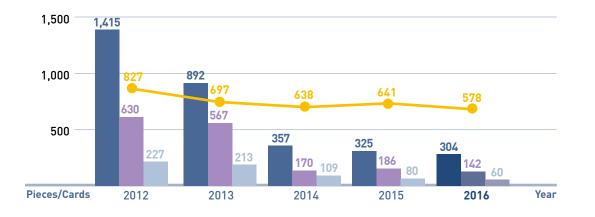
For NCCC merchants, NCCC implements effective monitoring and management system, consolidates and sends analytic fraud information to the credit card institutions, which helps creating a more secure credit card transaction environment in Taiwan. •

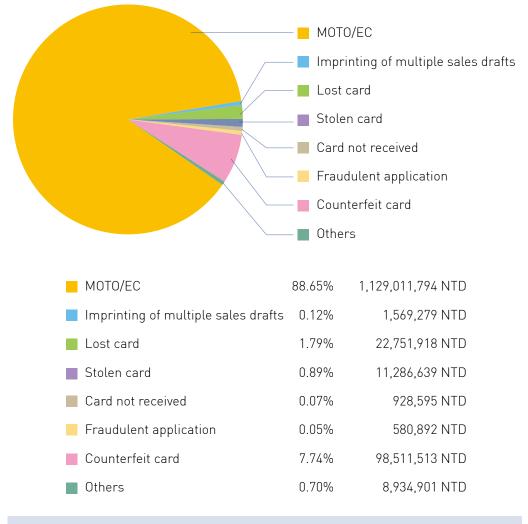
#### **Operating Results in 2016**

#### A • Risk Merchant Control and Credit Card Confiscation

- Number of risk merchants investigated:
  - 304 merchants investigated in 2016, dropped 21 from 325 merchants in 2015.
- Number of risk merchants on monitor list:
  - 142 merchants on monitor list in 2016, dropped 44 from 186 merchants in 2015.
- Number of risk merchants cancelled:
  - 60 merchants cancelled in 2016, dropped 20 from 80 merchants in 2015.
- Number of cards confiscated by merchants:

578 cards confiscated by merchants in 2016, dropped 63 from 641 cards in 2015.





#### **B** • NCCC Member Institutions'Card Issuing Fraud Types - % shares

Remarks (1) MOTO/EC : Non-face-to-face transaction made without authorization by the genuine cardholder

- (2) Imprinting of Multiple Sales Drafts: Merchant falsely uses cardholder's data such as card number and forges transactions.
- (3) Lost card: Card lost and found used fraudulently
- (4) Stolen card: Card stolen and used fraudulently
- (5) Card not received: New/Renewed Card intercepted during mail and used fraudulently
- (6) Fraudulent application: Card applied and used fraudulently without authorization by the genuine cardholder
- (7) Counterfeit card: Card counterfeited and used fraudulently
- (8) Others: Other types of fraud not listed above

#### Data period

January 2016 – December 2016

#### **Card brands**

U Card, Visa Card, MasterCard, JCB Card

#### Total fraud loss reported by the NCCC card issuing member institutions:

NT\$1,273,575,531 (not actual loss)

#### Data source & Notes:

In compliance with the international credit card associations' operating regulations, all the card issuers must periodically submit credit card fraud transaction data for card associations to consolidate and to have a good command of the fraud information. NCCC consolidates those fraud transaction data of the NCCC card issuing member institutions (not including non-NCCC members, i.e. some of the foreign banks and the FISC members) who report it according to the operating regulations and creates graphic representation of data for all circles to grasp the current situation and latest trends of credit card fraud.

As the mobile payment flourishes and Internet transaction greatly increases, the cyber fraud incidents have been rising simultaneously in recent years. Among those, the fraud incidents from the international well-known websites of game points selling and online video and audio stream platform have registered the fastest growth. The card issuers of Asia Pacific, Australia, North America, and Europe have been seriously under challenge; Taiwan's card issuers have also been affected as well. In addition, data compromise of credit card account has been frequently occurring recently that has captured more attentions to cyber fraud and has become a focused risk issue in the credit card industry.

Under the existing settlement regulations of international credit card associations, the credit card holders usually do not suffer actual loss in cyber frauds. However, facing the environment of fast-growing online fraud transactions, the credit card holders should well safeguard his/her cards to avoid disputes from fraudulent use, strengthen online transaction security concerns, and take positive move to adopt one of the credit card associations' security mechanisms (e.g. 3D authentication) in making online transactions to further protect his/her own consumer rights.

#### Credit Card Big Data Application Platform

In response to the government's policy and data analysis reference needs by the industries, government and academic sectors, NCCC, in 2015, initiated opening credit card transaction data processed by NCCC, which are categorized into groups by areas (6 metropolitan cities and 16 counties), industries (food & beverage, clothing, lodging, transportation, education, entertainment, department stores, etc.) and electronic commerce transactions, for offering all communities to download for reference. In 2016, NCCC continued developing more various analysis factors on the platform and opening credit card related data to public. The achievements of data open are summarized as follows:

#### **Business Statistics**

12 sets of statistical reports covering domestic settlement transaction amount & number of transactions, processing center's transaction amount & number of transactions, number of cards issued by NCCC Members, number of point of sale terminals installed by NCCC, analysis of NCCC Members' credit card fraud types, NCCC merchant categories & share of each category, number of credit card authorization-switching transactions, credit card cash advance transaction amount & number of transactions, number of NCCC acquired merchants, NCCC merchant network distribution - percentage share in each area, number of NCCC's riskmonitoring merchants & number of cards picked up in-store, and operating statistics of e-government service platform.

#### **NCCC Processed Data**

104 sets of statistical reports covering the credit card transaction data processed through NCCC; categorized into groups by areas, industries, electronic commerce and foreign credit cardholders' purchase transactions in Taiwan.

#### **Purchase Transaction Data of Taiwan-Issued Credit Card**

849 sets of statistical reports covering the purchase transaction data made by all the credit cards issued by Taiwan's banks and/or financial institutions; linking with de-identified cardholders' characteristics (including gender, age, annual income, occupation, education, etc.) and generating analyses of Taiwan credit cardholders' consumption patterns as well as purchase transactions made cross border and cross cities/counties in Taiwan.

## **Business Performance**

# ANNUAL REPORT 2016 NATIONAL CREDIT CARD CENTER



#### **01** Major Achievements in 2016

#### A • Businesses coordinated with government policy:

- 1 To coordinate with the government's policy of open data, NCCC has released open data results along with application cases since January 2016. Meanwhile, NCCC's data base and data analysis report have covered data from all the credit card business institutions in the Taiwan market (including non-NCCC Members). Based on the data from all institutions, NCCC's Big Data system outputs the cardholders' characteristics matching and consolidates into 19 items of data. Accordingly, NCCC has begun releasing the Taiwan credit cardholders' consumption patterns every month since the end of October 2016. The research and analysis reports are periodically updated on the NCCC's website and government open data platform for the free use of industries, government, academic sector and general public, as well as for exploring new business opportunities.
- 2 Solution To be in line with the government policy of implementing "Digital Banking 3.0 Plan" and to be compliant with the electronic payment institution related laws enhancing financial service operation efficiency, NCCC introduced a platform of "Credit Card Served as an Auxiliary to Cardholder Authentication" providing authentication service for the electronic payment institutions in the first phase. The platform formally went live in August 2016 with 33 credit card issuers and 19 acquirers participating by year-end 2016.
- 3 In support of the initiative of credit card served as an electronic invoice carrier adopted by the Fiscal Information Agency, Ministry of Finance in April 2016, NCCC provides a Gateway system for immediate transferring data stored on the credit card and identity verification as well as allowing cardholder enquiring transaction data and invoice printing out for receiving prize.
- 4 S To coordinate with the policy of "e-Tax Refunding for Purchase by Foreign Visitors" implemented by the National Taxation Bureau of Kaohsiung, Ministry of Finance, allowing multi-options including cash, check and credit card for foreign visitors to receive tax refunds, NCCC worked together with the Chunghwa Telecom Co. Ltd. in developing an operation system of tax refund by credit card (including Visa, MasterCard, JCB and UnionPay). The e-tax refund system was formally rolled out on 1 May 2016.
- 5 Responding to the business need of domestic insurance business institutions establishing Offshore Insurance Unit OIU selling foreign-currency insurance policies which permitted by the Financial Supervisory Commission, NCCC, in August 2016, submitted an application to the regulatory authority for approval to engage in the business of "foreign-currency acquiring, authorization switching, clearing and settlement processing" and US Dollar-settlement operation for foreigners' foreign-issued Visa, MasterCard and JCB credit card transactions (Internet online transactions not included) in Taiwan. Such an operation mechanism can not only apply to Offshore Insurance Unit, but also to merchant locations where foreigners usually make credit card payments, such as duty free shops and airlines.

#### **B** • Enhancing payment environment:

- 1 To coordinate with the regulatory authority's policy of promoting international mobile payment businesses launched in Taiwan (e.g.: Apple Pay, Samsung Pay, Android Pay, etc.), NCCC completed establishment of domestic TSP and foreign TSP systems switching mechanism in view of acting as a role of providing services to NCCC card issuing members, integrating resources, eliminating repetitive investment costs and enhancing the whole industry's benefits.
- 2 In response to the growing trend of mobile payments, NCCC plans to develop Wallet Service to be unveiled by phases gradually according to the business know-how accumulated and depending on the market needs as well. An initiative of "Safe and Speedy Checkout Payment Application" linking with credit card accounts will be introduced at individual store in the first phase. Enabling NCCC Wallet to be used cross multiple stores will be implemented in the second phase. And, NCCC Wallet linking with other wallet programs will be launched in the third phase. The first phase is planned to go live by the year-end 2017.
- 3 NCCC, on 1 June 2016, obtained approval from the Financial Supervisory Commission to engage in "Electronic Stored Value Card Transaction Operation Platform" service providing of ESV acquiring business expanding and terminal equipment sharing with ESV card issuers, which produces significant beneficial result for Taiwan's payment industry development.
- 4 S To support the goal of "Double the PCE Percentage of Electronic Payments in 5 Years" set by the Financial Supervisory Commission, NCCC, in October 2016, further extended the application range of Credit Card Payment Platform for Public Agency Fee to public hospitals enabling the general public to make payment by credit card at public hospitals in addition to at the public agencies and state-run enterprises.
- 5 S To enhance the electronic commerce transaction security and help improve NCCC members' cardholder service quality, NCCC completed upgrading Access Control Server (ACS) authentication platform in May 2016, continually complying with PCIDSS and international credit card associations' information security related rules.

#### C • Winning honor:

- 1 NCCC's website was rated "Excellent" by the Financial Supervisory Commission in website performance evaluation on all its periphery institutions on 20 March 2016, and passed claim of conformance level A+ for "Handicap-free Web Accessibility Service" issued by National Communications Commission on 6 April 2016.
- 2 NCCC won a 2016 "Golden Security Award" presented by the Joint Credit Information Center to the outstanding institutions recognized for excellence in information security on 27 December 2016.

#### **D** • Taking part in community activities:

- 1 . NCCC, fulfilling the responsibilities of participating in public welfare activities, sponsored "6-10 March 2016 Tour de Taiwan - International Bicycle Race Around Cross-island Highway" hosted by Chinese Taipei Cycling Association aimed to help promote foreign visitors touring and spending in Taiwan and further elevate Taiwan's presence on the world stage.
- 2 . To carry out the Financial Supervisory Commission's policy of promoting financial technology development, NCCC, in March 2016, took part in the task force of "Fintech Development Fund Management Committee" established by the Taiwan Financial Services Roundtable and executed by the Institute for Information Industry. NCCC commits itself to urging and facilitating innovations in financial technology industry and information services industry. Meanwhile, NCCC implements Fintech talent training program to enhance the industry competitive strength and to improve the financial service workers' profession ability.
- 3 . To coordinate with the Financial Supervisory Commission's week series activities of financial education, NCCC, on 11 March 2016, supported the seminar of "Corporate Ethics - Industry Best Practices Learning" conducted by Department of Finance, National Dong Hwa University, welcomed about 70 students' visiting and introduced our country's payment card industry development, mobile payment business, etc., thus, conveying financial service knowledge to the next generation.
- 4 . In response to the emerging trends of Fintech and mobile payments, NCCC worked together with the periodical "Global Views Monthly" in co-hosting a forum of "Strategies for 2016 Fintech Innovation Trends" aimed to promote NCCC's corporate image in endeavoring to push ahead with big data analysis project and mobile payment business as well as to deliver financial technology related information.

#### **02** Business Plans for 2017

#### A • Responding to the trend of virtual and physical integration in digital financial technology, to develop electronic wallet, mobile payment, and Internet payment businesses:

- 1 Following close behind establishment of "Credit Card Payment Platform for Public Agency Fee" in 2016, NCCC plans to develop mobile payment APP for "Credit Card Payment Platform for Public Agency Fee" and to link LBS (Location Based Service) push notification technology with mobile payment function.
- 2 In accordance with the transaction data security requirements on NCCC merchants' operation, NCCC shall continuously implement the secure payment mechanism, "Safe Pay", which will be processed through cloud-based database set up by NCCC and will provide an enhanced account-on-file function enabling transaction security and speed but no payment data retained at the merchant end.
- 3 NCCC shall evaluate the feasibility of developing self-innovated common carrier for credit card and electronic invoice integrated with electronic wallet payment function to implement the mechanism of credit card as electronic invoice carrier and to promote the Taiwan's own payment card brand.
- 4 To evaluate the feasibility of launching the NCCC's various value-added application services (e.g.: installment payment, bonus accumulation & redemption) onto mobile phone credit card and other payment carriers (e.g.: QR Code, wearable mobile devices) and to timely develop and implementation.
- 5 To continue implementing transaction compatibility test service for domestic-issued mobile phone credit card (SE/HCE) and debit card (Smart Pay), and conducting transaction interoperability test for various payment tools on the NCCC's point-ofsale terminal system.
- 6 Based on the NCCC's existing merchant network, NCCC shall develop proprietary mobile APP payment guidelines that integrates with the Wallet Service platform and QR code payment operations, supporting online order, online booking, offline payments and utilities payments (e.g.: water, electricity, gas).

#### B • In accordance with government policy of "Double the PCE Percentage of Electronic Payments in 5 Years", expanding payment card application channels and implementing innovative service functions:

1 • To expand application scopes of "Credit Card Payment Platform for Public Agency Fee" and to evaluate enhancing the system extensibility; also, to plan introducing fee payment function of electronic stored value card on the point-of-sale terminal system.

- $2 \cdot$  To actively approach the electronic stored value card business operators on outsourcing to NCCC their partner merchant recruitment and sales draft acquiring processing, etc.
- 3 . To continue pushing ahead with development and implementation of NCCC's pointof-sale terminal system network integration (including but not limited to credit card, debit card, electronic invoice, electronic wallet, installment payment, bonus accumulation/redemption, rewards, etc.) in order to provide all-around services and increase electronic payment tool usage.
- 4 . To actively promote online uploading merchant copy of sales draft and to implement simplified sales draft printing program so as to lower the NCCC's acquiring operation cost as well as merchants' personnel management cost in warehousing.

#### **C** • Enhancing Credit Card Payment Data Open System Applications:

- 1 · In accordance with the government policy and industry requirements, NCCC shall continue promoting opening payments data of credit card and periodically release various items of credit card related data.
- 2 NCCC shall actively coordinate with other credit card business institutions in NCCC's collecting data of credit card payment transactions, risk control and characteristics of cardholders, allowing NCCC to open data without disclosing the cardholders' identity and enabling data completeness.
- 3 . NCCC shall plan to provide the partner merchants with industry analysis of credit card payments to help them strengthen competitiveness; and further, to enhance their coherence to NCCC's services.
- 4 NCCC shall evaluate and develop other value-added services to meet the customized needs from various institutions. In addition, NCCC shall formulate a fair reward mechanism to those data providing institutions.

#### D. Upgrading infrastructure and Improving back-office operating efficiency & service quality:

- 1 . To enhance merchant service quality, NCCC draws up plans of expanding online updating merchant data scope, strengthening e-Statement system service functions and notifying merchant of contract effective date by e-mail.
- 2 Sy launching e-invoice and e-report through domestic settlement system, NCCC continues to promote the operating costs itemized billing mechanism to member institutions.
- 3 . To plan building up a stand-alone Payment Gateway at frontend of point-of-sale terminal system to support the merchants and sub-merchants of the payment facilitators in network linkage for transaction authorization over the Internet.
- 4 . Responding to the member institutions' operation requirements, NCCC shall provide more comprehensive information about NCCC web portal operations, handle the

participating institutions' immediate case enquiring, continuously conduct business operation sessions, in order to enhance the member institutions' knowledge on NCCC and interactions with NCCC.

- 5 NCCC shall plan to establish a cardholder data verification platform for merchants and card issuers to enhance online transaction security and to reduce the risk of data leakage in transmission.
- 6 
   NCCC shall facilitate the ACS 3D authentication service participating card issuers to implement text messaging mechanism that streamlines registration and transaction processing.
- 7 Sy getting a good grasp of various types of industries, NCCC continues to improve merchant credit examination ability and effectiveness. NCCC shall also reinforce requesting proper submission of merchant contracts from the recruitment team so as to shorten merchant screening time. In addition, NCCC shall periodically check on those merchants with no sales draft deposit and take necessary actions to maintain the quality of partner merchants.

#### **E** • Strengthening information security and risk control:

- 1 NCCC shall reinforce web security mechanism, implement web vulnerability scanning tool, and integrate the existing Web Application Firewall (WAF) systems in order to detect web attack at an early date and to defend new types of cyber-attack.
- 2 NCCC shall initiate a plan of self-building the core system of authorization switching which shall be carried out by stages and scheduled to complete with advantages of self-control system maintenance by the year-end 2017. Meanwhile, NCCC shall renovate the domestic settlement processing system to improve system processing and maintenance efficacy.
- 3 To be compliant with the international credit card associations' operating standards of data security control, NCCC shall continue to strengthen EC merchant education on data security and to ensure that the version of Transport Layer Security (TLS) adopted for online transaction meets the data security standards.
- 4 NCCC shall conduct sessions on risk control and fraud prevention for the member institutions, gather and consolidate new additional requirements or functions proposed by the member institutions and modify the "Transaction Risk Alert & Control Enforcement (TRACE)" system functions accordingly.
- 5 NCCC shall strengthen screening and monitoring on those merchants who are in customer prepaying merchandise business and shall regularly examine and modify the risk parameter so as to reduce risk loss caused from "merchandise or service not delivered".
- 6 NCCC shall continue strengthening cooperation with the law enforcement agencies, international credit card associations, Bankers Association of the ROC and the credit card business institutions, supporting international credit card associations in inviting the law enforcement agencies to participate risk forums, collecting and

analyzing the latest fraud cases, criminal techniques as well as having a good command of the updated fraud loss information for the credit card industry players' reference.

- 7 NCCC shall continue reviewing the member institutions' credit ratings assigned by the credit rating agencies to protect the NCCC's and NCCC members' interests. Also, NCCC, complying with the outsourcing regulations promulgated by the regulatory authorities, shall reinforce managing the operation outsourcing institutions so as to ensure NCCC's rights protection and personal data security.
- 8 NCCC shall continue to increase the employees' awareness of law compliance, to reinforce implementation of the NCCC's personal information management policy and to enhance the employees' concept of protecting personal data.

#### F • Fulfilling corporate social responsibilities, participating in concern-for-society activities, including public welfare and charity as well as financial knowledge education programs:

- 1 To fulfill corporate social responsibilities, NCCC shall continue to support concernfor-society activities, government policy promoting programs and any other activities for public welfare.
- 2 Responding to the global market trends of mobile-based and digital financial services, NCCC shall conduct forums or symposiums on various related topics accompanied with corporate image advertisement posting on periodicals of economics and finance to reflect NCCC's professional image of creativity and innovation in the Taiwan's payment card industry.

### NCCC Annual Major Events

# ANNUAL REPORT 2016 NATIONAL CREDIT CARD CENTER



1 Major Events in 2016

#### January

- 1/1NCCC formally launched "Credit Card Payment Platform for Public Agency Fee" and the first participating group of 14 government bodies providing credit card payment service over counter included New Taipei Branch, Administrative Enforcement Agency, Ministry of Justice and Land Affairs Offices, Taoyuan City as well as Land Affairs Offices, Taipei City.
- 1/7 NCCC released open data results along with application cases at the routine press conference called up by Financial Supervisory Commission since having successfully launched an Open Data platform according to the government policy with outstanding performance recognized in 2015.
- 1/28 The 10th meeting of the 11th NCCC Board of Directors and Supervisors was held.

#### February

2/15 NCCC implemented a "Disaster Relief Program for 0206 Tainan Strong Earthquake" providing those partner merchants in Tainan area with aids including service fee waived, no charge on terminal equipment damages and no collection on the disputed funds, etc. from the period of 1 February to 30 April 2016.

#### March

3/1 To carry out the Financial Supervisory Commission's policy of promoting financial technology development, NCCC took part in the task force of "Fintech Development Fund Management Committee" established by the Taiwan Financial Services Roundtable, and committed itself to urging and facilitating innovations in financial technology industry and information services industry. NCCC also implements Fintech talent training program to enhance the industry competitive strength and to improve the financial service workers' profession ability.

- **3/6** NCCC sponsored "2016 Tour de Taiwan International Bicycle Race around Cross-island Highway" hosted by the Chinese Taipei Cycling Association on 6-10 March 2016.
- 3/11 In response to the Financial Supervisory Commission's week series of activities on financial education, NCCC supported the program of "Corporate Ethics-Industry Best Practices Learning" conducted by Department of Finance, National Dong Hwa University, welcomed the students' visiting and introduced our country's payment card industry development, mobile payment business, etc., thus, carrying out delivering financial knowledge to the next generation.
- 3/15 NCCC's UnionPay Card acquiring, authorization switching and settlement processing added in transactions of Mail Order/Telephone Order (MO/TO), Recurring Payment and In-Flight purchase, which enables local merchants to accept these types of transactions made by the Mainland China tourists.
- **3/20** NCCC's website was rated "Excellent" by the Financial Supervisory Commission in website performance evaluation on all its periphery institutions.
- **3/28** To promote NCCC's corporate image in endeavoring to push ahead with big data analysis project and mobile payment business as well as to deliver financial technology development information, NCCC worked together with the periodical "Global Views Monthly" in co-hosting a forum of "Strategies for 2016 Fintech Innovation Trends".

#### April

- **4/6** NCCC's website both in Chinese and in English version passed claim of conformance level A+ for "Handicap-free Web Accessibility Service" issued by National Communications Commission.
- **4/12** The 11th meeting of the 11th NCCC Board of Directors and Supervisors was held.
- 4/18 NCCC cooperated with Taiwan High Prosecutors Office in participating on the "Cross-border Telecommunication Fraud Crime Fighting and Stolen Goods Recovery Platform".

- 4/18 NCCC passed annual British Standards Institution BSI re-certification of BS10012 for the Personal Information Management System. The BSI recertification reinforces NCCC's ability in managing data security and strengthens clients' trust in NCCC.
- 4/20 NCCC President attended the 5th UnionPay International Northeast Asia Regional Member Council Meeting held in Hong Kong.
- 4/28 Converging finance profession upon literary activities, NCCC sponsored exhibit of "The Rise and Legacy of Qin Culture" held at the National Palace Museum and provided credit card transaction terminals at the ticket selling point and souvenir shop for visitors to experience the convenience of credit card payment during the Taipei exhibit period (7 May - 31 August 2016).

- 5/1 NCCC provides a Gateway system which transfers data stored on the credit card as an electronic invoice carrier between the Fiscal Information Agency, Ministry of Finance and credit card issuers.
- 5/1 NCCC partners with the Chunghwa Telecom Co. Ltd. in introducing "Outsourcing Service of e-Tax Refund by Credit Card for Foreign Traveler Purchase" which allows foreign travelers to directly receive tax refunds by credit card for purchases in Taiwan before departing at airport or at harbor.
- 5/10 NCCC President attended the 2016 Visa Asia Pacific Risk Executive Council meeting held in Phuket Island, Thailand.
- 5/16 NCCC launched "Online Updating Merchant Information" service for merchants to easily change information of address, website, telephone and fax through e-statement system.
- 5/25 NCCC Chairman attended the 2nd Meeting of the 2nd UnionPay International Member Council held in Shenzhen, China.

#### une

6/1 NCCC obtained approval from the Financial Supervisory Commission to engage in "Electronic Stored Value Card Transaction Operation Platform" service providing of ESV acquiring business expanding and terminal equipment sharing with ESV card issuers, which produces significant beneficial result for Taiwan's payment industry development.

**6 / 30** The NCCC Access Control Server (ACS) Authentication Service platform passed examination by Visa designated qualified Security Assessor, Nanaroq Inc., and was certified as in compliance with Visa ACS security program.

#### July

- 7/1 A great many of Department Stores acquired by NCCC implemented cloud uploading system for submitting electronic signature-based sales drafts. The paperless operation can not only reduce the merchant's manpower and storage costs for paper sales drafts, but help environment protection as well.
- **7/8** Donating NTD1,000,000 for disaster relief and reconstruction after the occurring of the strong typhoon Nepartak.
- 7/11 NCCC implemented a "Disaster Relief Program for 0708 Taitung Typhoon" providing those partner merchants in Taitung area with aids including service fee waived, no charge on terminal equipment damages and no collection on the disputed funds, etc. from the period of 1 July to 31 December 2016.
- **7 / 15** Celebrated the NCCC's 33rd anniversary of establishment.
- **7/26** The 12th meeting of the 11th NCCC Board of Directors and Supervisors was held.

#### August

 8 / 25 NCCC President attended the 6th UnionPay International Northeast Asia Regional Member Council Meeting held in Ulaanbaatar, Mongolia.

#### September

**9/13** The participation of Taiwan Rakuten Card, Inc. in NCCC's Access Control Server (ACS) Authentication platform going live.

#### October

- 10/1 NCCC extended the application range of Credit Card Payment Platform for Public Agency Fee to public hospitals enabling the general public to use alternative payment tool at hospitals; thus, increasing electronic payment share percentage.
- 10/1 To be in line with the government policy of implementing "Digital Banking 3.0 Plan" and to be compliant with the electronic payment institution related laws, NCCC, approved by the regulatory authority and through discussions conducted by the Bankers Association of the ROC, introduced a platform of "Credit Card Served as an Auxiliary to Cardholder Authentication" formally going live for the electronic payment institutions since October 2016. 10/7
  - NCCC established uniform Electronic Stored Value Card specifications for acquirers, which lowers the threshold of technology requirements for conducting acquiring operation, increases multiple partnership opportunities and helps heighten the domestic electronic payment share percentage.
- 10/21 NCCC co-sponsored with the United Daily News in a public welfare event of "Classic French Musical - Romeo and Juliette", where a hundred of teachers and students from the Department of Theater Arts, National Taiwan College of Performing Arts were invited to appreciate the splendor of the musical, and the arts was to a certain extent promoted in the young students. NCCC also provided credit card transaction terminals at the souvenir shops there for the general public to experience the convenience of credit card payment during the show period (21 – 30 October 2016).
- 10 / 25 The 13th meeting of the 11th NCCC Board of Directors and Supervisors was held.
- 10 / 27 A seminar of "Transaction Risk Alert & Control Enforcement (TRACE)" for 2016 was held at the NCCC hall.

#### November

- 11/1The 1st meeting of the 12th NCCC Board of Directors and Supervisors was held.
- 11/3 The participation of Taichung Bank in NCCC's Access Control Server (ACS) Authentication platform going live with additional function of dynamic password authentication by text messaging.

- **11/8** NCCC participated a seminar of "Promotion of Electronic Payment Service for Fee Collecting by the Central Government" held by the Ministry of Finance and introduced the Credit Card Payment Platform for Public Agency Fee to the agencies of central government.
- **11/8** NCCC completed a version upgrade for "Contracted Merchant Agreement" consolidating 16 memorandums of special arrangement into one main contract so as to streamline processing of seal affixing and signing, to eliminate carbon copying and to save paper for environment protection.
- **11 / 16** NCCC President attended the 3rd Meeting of the 2nd UnionPay International Member Council held in Madrid, Spain.

#### December

- 12/20 Responding to the government's plan of "Fintech Development Promotion ", increasing maturity of payment card industry development and growing trend of mobile payment innovations and applications, NCCC participated a forum of "Insight into Taiwan Payment Card Industry Development from view of Fintech" hosted by the Institute for Information Industry, which was aimed to facilitate resource sharing for industries, government and academic sector and to create new partnership opportunities cross industries.
- 12/21 Industrial Bank of Taiwan joined in NCCC Members with operation system going live on 21 December. The Bank planned to officially change name to O-Bank and to commence issuing of Visa Debit Card and MasterCard Debit Card on 1 January 2017.
- 12/22 To support the government policy of adjusting Citizen's Travel Card measures for government employees, NCCC invited travel agencies to join in the program of "Travel & Entertainment Merchants for Citizen's Travel Card".
- 12 / 26 NCCC modified the Citizen's Travel Card Transaction Verification System, which was established and maintained based upon the commission of Directorate-General of Personnel Administration, Executive Yuan, in accordance with the new measures to be implemented on 1 January 2017.
- 12/27 NCCC won a 2016 Golden Security Award presented by the Joint Credit Information Center to the outstanding institutions recognized for excellence in information security.

**12/30** To increase electronic payment penetration rate and to promote internationalization of Taiwan's mobile payment business development, NCCC facilitates the credit card issuers in adopting the data tokenization technology to implement mobile credit card payment processing service.

#### 02 Events Happening



NCCC sponsored "2016 Tour de Taiwan nternational Bicycle Race around Crosssland Highway". Photo of NCCC Senior EVP, Eric Hwang (right), Champion of the "irst stop (center), and the award presenter 'left) at the event. (2016/03/06)

NCCC and the periodical "Global Views Monthly" co-hosted a forum of "Strategies for 2016 Fintech Innovation Trends". Photo of NCCC Chairman, Liu Teng Cheng (fourth from left), NCCC President, Lin Tong Liang (second from right), and other delegates at the Forum. (2016/3/28)





NCCC was invited to attend the launching ceremony of "FinTechBase" held by the Taiwan Financial Services Roundtable. Photo of NCCC Chairman, Liu Teng Cheng (fourth from left) and other delegates at the event. (2016/4/14)







NCCC co-sponsored with the United Daily News in a public welfare event of "Classic French Musical - Romeo and Juliette", where a hundred of teachers and students from the Department of Theater Arts, National Taiwan College of Performing Arts were invited to appreciate the splendor of the musical. Photo of NCCC Senior EVP, Hanover Chu (eighth from left), the teachers and students at the event.(2016/10/21)



NCCC won a 2016 "Golden Security Award" presented by the Joint Credit Information Center to the outstanding institutions recognized for excellence in information security. Photo of NCCC staff and other awarded representatives at the award presentation ceremony. (2016/12/27)

## Appendix

#### **Directory of Member Institutions (As of December 31, 2016)**

Member Institution Name	Address	Telephone
CTBC Bank Co., Ltd	11F., No.188, Jingmao 2nd Rd., Nangang Dist., Taipei City 115, Taiwan (R.O.C.)	(02) 2768-0505
Mega International Commercial Bank Co., Ltd	4F., No.99, Sec. 3, Chongyang Rd., Sanchong District, New Taipei City 241, Taiwan (R.O.C.)	(02) 8982-2222
Cathay United Bank	9F., No.88, Sec. 1, Zhonghua Rd., Wanhua District, Taipei City 108, Taiwan (R.O.C.)	(02) 2383-0111
E. Sun Commercial Bank Ltd	No.1, Lane 86, Tianxiang Rd., Zhongshan District, Taipei City 104, Taiwan (R.O.C.)	(02) 2587-1313
Union Bank of Taiwan	5F., No.399, Ruiguang Rd., Neihu District, Taipei City 114, Taiwan (R.O.C.)	(02) 2719-2233
The Shanghai Commercial Savings Bank Ltd	3F., No.87, Zhengzhou Rd., Datong District, Taipei City 103, Taiwan (R.O.C.)	(02) 2558-2111
Bank Sinopac Co., Ltd	6F., No.17, Bo-ai Rd., Zhongzheng District, Taipei City 100, Taiwan (R.O.C.)	(02) 2375-2277
Standard Chartered Bank(Taiwan Limited)	B1F., No.168, Dunhua N. Rd., Songshan District, Taipei City 105, Taiwan (R.O.C.)	(02) 2547-7888
KGI Bank	2F., No.188, Jingping Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)	(02) 8023-9077
Taipei Fubon Commercial Bank Co., Ltd.	6F., No.50, Sec. 2, Zhongshan N. Rd., Zhongshan Dist., Taipei City 104, Taiwan (R.O.C.)	(02) 6611-2555
Far Eastern International Bank	No.33, Alley 3, Lane 182, Sec. 2, Wenhua Rd., Banqiao District, New Taipei City 220, Taiwan (R.O.C.)	(02) 8073-1166
Jih Sun International Bank	9F., No.85 × 87, Sec. 2, Nanjing E. Rd., Zhongshan Dist., Taipei City 104, Taiwan (R.O.C.)	(02) 2561-5888
Taishin International Bank	3F., No.207, Sec. 2, Jiuzong Rd., Neihu District, Taipei City 114, Taiwan (R.O.C.)	(02) 8798-9999
Entie Commercial Bank	2F., No.36, Sec. 3, Bade Rd., Songshan District, Taipei City 105, Taiwan (R.O.C.)	(02) 2577-8577
Ta Chong Bank Ltd	6F., No.58, Zhongzheng 2nd Rd., Lingya District, Kaohsiung City 802, Taiwan (R.O.C.)	(07) 9696-589
DBS Bank (Taiwan) Ltd	12F., No.399, Ruiguang Rd., Neihu District, Taipei City 114, Taiwan (R.O.C.)	(02) 6612-9888
Taiwan Shin Kong Commercial Bank	8F., No.31, Lane 11, Guangfu N. Rd., Songshan District, Taipei City 105, Taiwan (R.O.C.)	(02) 8787-7272
Yuanta Commercial Bank Co., Ltd	6F., No.210, Sec. 3, Chengde Rd., Datong District, Taipei City 103, Taiwan (R.O.C.)	(02) 2182-1998
Sunny Bank	No.88, Sec. 1, Shipai Rd., Beitou District, Taipei City 112, Taiwan (R.O.C.)	(02) 2820-8166
Hwatai Commercial Bank Co., Ltd	11F., No.33, Jingye 4th Rd., Zhongshan District, Taipei City 104, Taiwan (R.O.C.)	(02) 2752-5252
COTA Commercial Bank	2F., No.339, Dazhi Rd., East District, Taichung City 401, Taiwan (R.O.C.)	(04) 2280-5288
Aeon Credit Card (Taiwan) Co., Ltd.	E · 5F., No.87, Songjiang Rd., Zhongshan District, Taipei City 104, Taiwan (R.O.C.)	(02) 2501-0880
First Commercial Bank	9F., No.203, Sec. 2, Bade Rd., Zhongshan District, Taipei City 104, Taiwan (R.O.C.)	(02) 2173-1988
Hua Nan Commercial Bank	12F., No.123, Songren Rd., Xinyi Dist., Taipei City 110, Taiwan (R.O.C.)	(02) 2371-3111
ANZ(Taiwan) Bank Ltd.	10F., No.333, Sec. 1, Keelung Rd., Xinyi Dist., Taipei City 110, Taiwan (R.O.C.)	(02) 8729-5555
Taiwan Rakuten Card Inc.	7F., No.49, Sec. 3, Minsheng E. Rd., Zhongshan Dist., Taipei City 104, Taiwan (R.O.C.)	(02) 2516-8328
Taichung Commercial Bank	No.87, Minquan Rd., West District, Taichung City 403, Taiwan (R.O.C.)	(04) 2223-6021
0-Bank	No.99, Sec2, Tiding Blvd., Neihu District, Taipei City 114,, Taiwan (R.O.C.)	(02) 8752-7000



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