TDCC NEWSLETTER

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OUTLOOK

With the Power of Data, the Registered Users of TDCC ePASSBOOK Cross over One Million

SPECIAL REPORT

TDCC Shares Experience at Conference on the Transformation and Reform of Core System

BUSINESS HIGHLIGHTS

The Completion of a Friendly E-Voting Environment for Foreign Shareholders

Everyday, Debit Day: New Systematic Investment Plan Service Goes Live

TDCC keeps enhancing new digital transformation to the bills market

STATISTICS

STOCK MUSEUM

Taiwan Stock Museum Adds "Animated Interactive Zone"

Outlook

With the Power of Data, the Registered Users of TDCC ePASSB00K Cross over One Million TDCC's core business was previously on back-office operation of the capital market. In response to the booming trend of fintech, the company has been actively involved in innovation and cross-industry collaboration. In March 2017, the ePASSBOOK App was launched as a direct communication channel with investors through an electronic form of passbook. In order to better meet user expectations, TDCC conducts a series of research on user personas and preferences by leveraging the power of data in order to design cutting-edge UI and UX. In November 2018, the 2.0 version of TDCC ePASSBOOK App was released and received favorable feedbacks. By the end of February 2020, the active accounts of TDCC ePASSBOOK has hit a million. Statistically, over 70% of the investors choose to apply TDCC ePASSBOOK as opening account at securities firms which witnesses the phrase-out of paper passbooks. It also shows TDCC ePASSBOOK, featuring with mobility and integration, is all the rage.

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How can TDCC ePASSBOOK, which has gone live for only three years, create such usable application interfaces and win good reputation? According to the TDCC analysis, 50% of the TDCC ePASSBOOK users are under age 35, relatively younger than the average age of investors ranging from 40 to 60 in Taiwan stock market. In addition, the "one cellphone multiple passbooks" feature heavily catches investors eyes. Users with two accounts login more times and stay longer on APP than those with only one account. As for the users preference, "MY ASSETS" featuring with "one passbook multiple assets" is the most favorable function. This function allows users to integrate multi-assets such as securities, bonds, mutual funds, and gold in one single APP. Averagely, each user spends 70% of time on "MY ASSETS" to compile and review integrated asset distribution and market value. The second favorite function is "eSTOCKSEARCH," which provides thorough market material information, financial information and

> table for spread of shareholdings for each securities. All these functions have provided investors with one-stop services and more productive ways in asset and equity management via mobile devices.



Outlook

TDCC has been employing the power of data to find out investors' needs to optimize the APP's functions and user experiences in exploring all kinds of possibility. It has been observed that the interest rates have been in low levels over years in Taiwan which triggers investors to move money from timed deposit into other assets such as insurance, securities, and mutual funds in order to seek better returns. As the rising trend of diversified investments, the needs of integration across multi-assets will be highly expected. Therefore, TDCC keeps seeking the possibility to cooperate with the banks by integrating bank accounts information into TDCC ePASSBOOK. Meanwhile, TDCC also joins National Chengchi University Global Research and Industry Alliance (NCCU GLORIA) with an eye to gaining the opportunity to work with more financial institutes and fintech start-ups to provide users with more cutting-edge functions.

Go ahead and apply to your securities firms for ePASSBOOK. Let's enjoy the ride of innovative services from TDCC!



Special Report

TDCC Shares Experience at Conference on the Transformation and Reform of Core System Taiwan Depository & Clearing Corporation (TDCC) has long been dedicated to financial innovation and diversified businesses, providing multiple services for markets and investors. This year marks the 30th anniversary of TDCC. The core securities service system has also been serving the securities and financial markets for nearly 30 years. Last year, TDCC smoothly transformed its system from a large mainframe-based model to an open platform. The Conference on the Transformation and Reform of the TDCC Core System took place on November 25, 2019 at The Sherwood Taipei. The conference incorporated speeches and panels regarding the discussions on the successful experience in IT system transformation and prospects for IT service development. On behalf of the host, Sherman Lin, Chairman & CEO, stressed the inevitable global trend of corporate digital transformation in his remarks. It is a pressing issue that all members of the company should improve their digital knowledge and capabilities. With the resources and core capabilities at hand, TDCC is actively promoting business diversification, serving as a safe, efficient, and cost-effective backend service provider for the securities market. Transformation and innovation are valued and fostered to keep up with the latest trends. The scope of services and clientele are expanded step by step. In addition, TDCC is helping the competent authority and governmental agencies to promote significant policies on the national level.



In the conference, Zhu Han-Qiang, TDCC President, mentioned the transformation history of the IT system for core businesses. The old system was developed in 1989. During the operation, for more than 20 years, the system has been revised several times since the businesses are more complicated and the company's scope of services has expanded. The development and test schedule as well as the batch processing have become more and more complex and timeconsuming due to the heavy load. Reforming the core system is imperative so as to fulfill the demands of diversified development, enhance the flexibility of extensions, and improve the problems of perplexing data correlation. Thus, the original



Special Report

mainframe-based system is upgraded to a new open mainframe. The hierarchical database model is replaced with a relational database model. The file structure is optimized; meanwhile, business is optimized and modularity in application programming is conducted. Since the commencement of this project in 2014, TDCC has applied a lot of talent and effort. It took four years to finally launch the new system in April 2018. The system has been operating smoothly since then.

An IBM Taiwan representative was an invited speaker of the conference, sharing the insight into IT system establishment projects and the success factors of the TDCC project. Yang Ren-Da, Vice President of the Institute for Information Industry, moderated the panel and opened up discussions with delegates from securities market-related organizations, and representatives of securities firms, banks, and insurance companies.

The conference generated lively discussions and is a great success. TDCC hopes that its IT system transformation experience can be useful for organizations in the same line of business who are interested in IT system transformation. Together, we can offer better services to the financial market.









Business Highlights

The Completion of a Friendly E-Voting Environment for Foreign Shareholders It has been over a decade since the electronic voting platform, StockVote, was constructed, and mandatory E-Voting has been implemented in all listed companies since 2018. With an average E-Voting rate reaching 53% in 2019, there's no doubt that E-Voting has become a vital channel for shareholders to participate in shareholder meetings.

According to the data from Taiwan Stock Exchange Corporation, foreign investors' holding of stocks in Taiwan reached a record high of 43.02% at the end of 2019. To expand shareholder meeting services for foreign investors, TDCC has adhered to the principle of "globalization" and worked with the foremost E-Voting institute Broadridge since 2014, offering cross-border Straight Through Process services and increasing efficiency in foreign investors' voting process. In 2019, TDCC started cooperation with the second biggest E-Voting institute in the world, Institutional Shareholder Services (ISS); foreign investors using ISS's voting platform are entitled to TDCC's cross-border Straight Through Process services to facilitate and speed up their voting process.

Although the above-mentioned STP services and proxy voting from custodian banks have provided a majority of foreign investors with E-Voting access, for the purpose of expanding the range of services for foreign investors, more functions are created. Some foreign nationals and institutional investors with neither custodian proxy nor related credentials can still conduct electronic voting at shareholder meetings. Since the second quarter of 2020, TDCC has been offering foreign shareholders without credentials the access to applying to issuers for a CN code, which serves as authentication when they log on an E-Voting platform. For foreign



investors' barrier-free access to E-Voting platform and participation in agenda voting, TDCC has also constructed an English E-Voting interface. As the company creates a friendly investment environment, more and more foreign investors will be drawn to Taiwan to develop a stronger capital market.



Business Highlights

Everyday, Debit Day: New Systematic Investment Plan Service Goes Live Systematic investment plan (SIP) has been one of the most popular investing strategies among Taiwanese. According to TDCC's data, the subscription amount of systematic investment plan through FundClear reached NT\$10 billion and the transaction number reached approximately 2 million, both increasing by two times compared to 2016.

To better service the investors for joining SIP, TDCC launched a new service on FundClear in January 2020 to enable SIP investors choose any date as their debit date. With this new function, investors can invest on a more flexible basis and mitigate the risk of market volatility.

Distributors also benefit from the new function by providing a more customized SIP service to their clients. Moreover, investors can decide their own debit timing for SIP will reduce risks for long-term wealth accumulation to enjoy a retirement life.



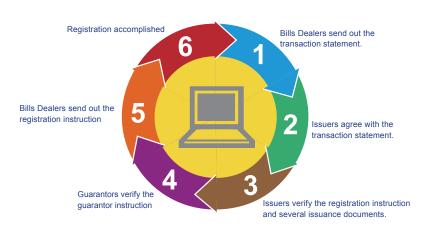
Business Highlights

TDCC keeps enhancing new digital transformation to the bills market

In light of the government's policy objectives and market demand, TDCC introduced electronic issuance of non-physical financial commercial papers (a.k.a. CP2) in September 2017. Commercial Paper is a money market debt instrument issued by corporations to obtain short-term funds to meet short term debt obligations. Based on the concept of platform economy, TDCC has built a digital platform that connected with issuers, bills dealers and guarantors. The service of electronic issuance document delivery in the primary bills market has rolled out in October 2018, providing issuers, bill dealers and guarantors a new platform to deliver multiple issuance documents online with the authentication mechanism of electronic signature.

In the past, bill dealers had to collect documents from issuers in person and then sent the documents to guarantors or vice versa, which could take about 3-4 hours. With electronic delivery and verification, the process could be completed in just 1-2 minutes, saving all participants a lot of time and accelerating money circulation in the market. Thanks to TDCC's electronic CP2 issuance and registration service, in 2019, the outstanding balance of commercial paper exceeded NT\$2 trillion, a record high in more than four decades.

In addition to producing making pamphlets to promote electronic CP2 issuance and registration, TDCC has also called or visited issuers to inform them of the advantages of electronic registration. In 2019, TDCC made over 1,500 visits to issuers and the number of issuers opting for electronic registration increased 1.3 times. As of end-2019, electronically registered CP2 accounted for about 70%



Six easy steps for electronic CP2 issuance and registration

of the total CP2 circulating in the market, up over 60% YoY. All in all, TDCC devotes to enhancing the digital transformation to the bills market and supporting a more efficient digitized business environment.



STATISTICS



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2019.1 2

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CP2/CP1/BA

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NCD

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STATISTICS





Stock Museum

Taiwan Stock Museum Adds "Animated Interactive Zone" To celebrate the 30th anniversary of TDCC, the Taiwan Stock Museum has especially designed an "animated interactive zone" in the museum hall. It reproduces the enthusiasm of securities trading and introduces the process of TDCC and security dematerialization. Dialogs will appear on the screen when clicking on the animation characters. Every visitor can get an interactive experience on the spot in a moving way.

In addition, the Taiwan Stock Museum has installed a large TV screen next to the "Animated Interactive Zone" to show the development of the Taiwan stock market and how TDCC pushed security dematerialization successes.

After the "Animation Interactive Zone" of the Taiwan Stock Museum was launched in November 2019, it attracted many young students to watch and learn, earning recognition from students and the public.

