



Modernizing Legacy Cheque Processing Systems

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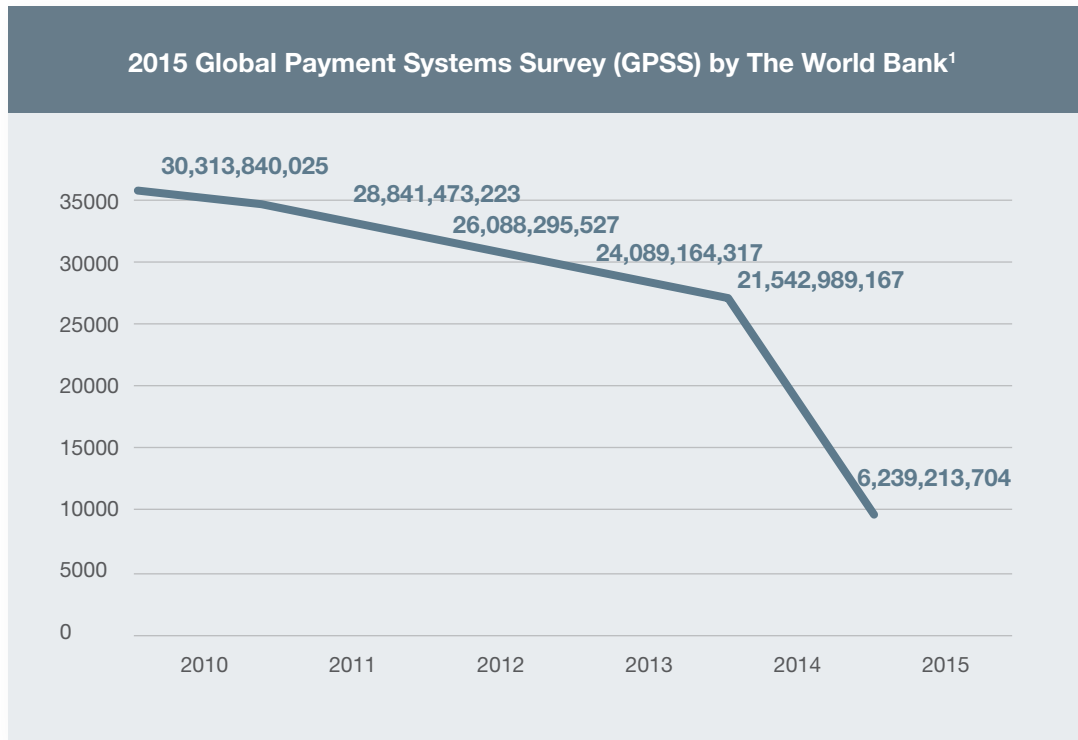


1. Background

Evolution of disruptive technology in the market has transformed traditional paper-based payment methods. While electronic payment methods have been on the rise globally, the use of cheques as a payment method seems to be on the decline...but will cheque payments be permanently eliminated? We believe that this paper payment method will not go down without a fight...especially in Asia.

Cheque processing is a cost center for banks that has always been a huge pain point; however, banks cannot do away with it as it is one of the core services provided to customers. According to the 2015 Global Payment Systems Survey (GPSS) by The World Bank, there was a 79.4% drop in cheque volume from 2010 to 2015.

1. Background (cont.)



Despite the 79.4% decrease in cheque volume from 2010 to 2015, the sheer volume of over 6 billion cheques still remaining is evidence enough that banks should not overlook the processing costs of this paper payment method.

The fact remains that cheque volume is still rather sizable—the client adoption habit of the cheque payment instrument appears to be rather resilient to various disruptive technologies. Many countries are still practicing physical cheque clearing, where cheques are physically being moved around the country. This practice usually requires 3-6 working days before the customer sees the amount of the cheque reflected in their account. As a result, most banks, regardless of size, need ways to seamlessly migrate from paper-based cheque processing to an image-based environment where clearing parties can achieve more efficient and cost-effective cheque processing.

¹Global Payment Systems Survey (GPSS) by The World Bank - <http://www.worldbank.org/en/topic/paymentsystemsremittances/brief/gpss>

1.1 The Challenges

1.1.1 Increasing Costs

The volume of cheque usage is decreasing, but it's not going away anytime soon. Cheque usage is so entrenched in banking processes that the volume processed on a daily basis remains consistently significant. While existing solution providers have little motivation to develop more efficient or cheaper enterprise systems, banks and financial institutions (FIs) are cornered into funding this enduring traditional payment method and struggling with legacy systems with impending EOLs.

Every change in the legacy systems to adapt to incoming challenges is painful, and it is outside the control of the banks and financial institutions; hence, external workarounds are exploited, often causing the processing cost per cheque to increase unnecessarily.

1.1.2 Refresh of Hardware and Software

FIs and banks can either process cheques through manual handling or traditional (4-eyes maker-checker) submission of cheque data, resulting in challenges to meet the stipulated window of time due to inefficient and time-consuming cheque processing flows. The majority of FIs and banks invest in software systems to help alleviate resources and reduce headcount costs. This is especially prevalent for Cheque Truncation System (CTS) compliant countries as the benefits present themselves to reduce costs and increase overall accuracy and efficiency.

However, as CTS is a mature policy itself in several countries in Asia (countries like Singapore implemented in 2002², Hong Kong in 2003³, Malaysia in 2008⁴, Thailand in 2010⁵, etc.), there is a growing trend of solution providers increasing the cost of maintenance and cutting back on research and development of current systems. Even with current systems that set out to lower cost and resources, FIs and banks are experiencing increased inconvenience and taking on unplanned costs, such as costs that come with legacy systems, failing hardware and a non-existent technology roadmap.



SUMMARY:

- *High fixed costs remain while cheque volume decreases.*
- *Legacy systems are slowly failing and incurring unplanned costs for banks and FIs.*

²MAS Bills of Exchange Cheque Truncation 2002 -

<http://www.mas.gov.sg/regulations-and-financial-stability/regulations-guidance-and-licensing/payment-and-settlement-systems/regulations/2002/bills-of-exchange-cheque-truncation-2002.aspx>

³HKMA Live Operation of the Cheque Imaging and Truncation System -

<http://www.hkma.gov.hk/eng/key-information/press-releases/2003/20030410-3.shtml>

⁴BNM Introduction of the Cheque Truncation and Conversion System (CTCS) -

http://www.bnm.gov.my/index.php?ch=en_press&pg=en_press&ac=522&lang=en

⁵BOT Imaged Cheque Clearing and Archive System (ICAS) -

<https://www.bot.or.th/Thai/PressAndSpeeches/Press/News2552/n4452e.pdf>

1.1 The Challenges (cont.)

1.1.3 Country/Region-Specific Regulatory Requirements

CTS-compliant countries implement changes to the requirements to improve on the payment systems and strengthen the regulatory framework. FIs and banks face difficulties to carry out changes to the current systems: either the current systems do not have the flexibility or agility to accommodate the changes, or it takes longer and costs more to make the changes. This results in FIs and banks deploying multiple solutions within the same bank for each operating country, thus lacking control, visibility and uniformity of the systems within an organization. For countries that are new to CTS, solution providers may be unfamiliar with the processes.

1.1.4 Change Management

Despite the many motivations for change, FIs and banks are faced with resistance. The main perception of change is that it is too costly to replace current legacy systems. People within FIs and banks are unwilling to rock the boat and fix something that is not broken, despite the fact that it may incur increasing long-term costs and inefficiencies, thereby slowly squandering revenues and resources. Without vendors / business partners offering change management solutions and having experience in executing progressive change activities, the fear of uncertainty and lack of exposure are the common drivers of FIs and banks being resistant to changing the current systems.



1.1 The Challenges (cont.)

1.1.5 Country/Bank-Specific Requirements

In countries like Thailand, Philippines and several other middle eastern countries, the practice of requiring customers to submit 24 to 36 postdated cheques (PDCs) is a common way of doing business for purchases of cars, properties, rentals, etc. Even in more advanced countries like Australia or Hong Kong where auto-pay or auto-debit options are readily available, the practice of using cheques for expenses such as school fees, buses, piano lessons and home repairs seems to be the norm and is unlikely to change in coming years.

Regulators in some countries provide outsourcing services to FIs to process their cheques; some FIs outsource these operations to Business Process Outsourcing (BPO) providers. These players face challenges of rising labour costs and aging hardware and software, yet need to meet the stringent security and processing timelines of FIs or otherwise face paying damages.

Small and medium-sized enterprises (SMEs) use cheques as a tool for evidence of payment and to time their payments to suppliers, which is a common practice to better manage cash flow, fully utilizing the characteristics of cheque clearing to their advantage. Or, sometimes, they will permit their cheques to bounce and pay the fine, yet buy enough time to manage their cash flow.

Some FIs provide PDC services for their corporate clients as a service. From this, we see that cheques are not just a legal payment instrument for bank customers; they are a form of revenue for FIs as well regulators and BPOs.



SUMMARY:

- *Multiple solutions deployed within the same bank results in lack of control, visibility and uniformity.*
- *Current vendors of banks and FIs are unable to provide consultative services to help manage change.*
- *BPO providers are facing challenges of increased costs and having to comply with strict security and processing timelines of FIs, or face charges.*



2. Current Trends

While the majority of FIs and banks are balancing the cost and benefit of changing a system, they understand that the scope of the new cheque processing system must evolve to adapt to new requirements:

- Distributed hardware
- Mobile cheque deposit
- Dynamic cheque clearing
- Remote deposit cheque (RDC)
- Consolidation of current systems
- Straight-through processing (STP)
- Automated Technical Validation (ATV)
- Automated Signature Verification (ASV)

Some FIs and banks are taking small steps to make these changes to their current cheque processing systems. At Top Image Systems (TIS), we helped a global bank consolidate different systems in Singapore, Philippines and Thailand—rolling out the project in phases that were palatable to the users and supported by the management team. For example, making improvements by adding modules of automation within the processes helps to reduce operating and manpower costs.

In addition to consolidating multiple systems, we implemented dynamic cheque clearing, facilitating business rules to clear cheques automatically that are within payment risk thresholds. This achieved straight-through processing without human intervention. Working with this global bank, we understood that certain manual processes involving visual checking could be replaced with the help of automation—reducing the time, effort, and risk of error involved. We implemented the Automated Technical Validation (ATV) module to perform the validity and acceptability of the cheques, in accordance with regulatory rules.

2. Current Trends (cont.)

Use Case - Global Bank

Cost savings from replacement cheque processing system instead of maintaining legacy systems:

- *Consolidation of multiple systems*
- *Dynamic cheque clearing to achieve Straight-Through Processing (STP) within bank's risk appetite*
- *Automatic Technical Validation (ATV) to ensure acceptability of cheques according to regulatory rules without human intervention*

After the implementation of the new cheque processing system with the added automated abilities, the global bank was able to streamline costs drastically. It was clear from the start that replacing, rather than maintaining the legacy systems, made more financial sense, and the exercise proved that.

Some FIs and banks are leading the change through innovating their current traditional service offerings to keep ahead in the market. The main motivation to innovate is to redefine the business arena and establish a sizable market share in this zero-sum game. One such example is the introduction of mobile cheque deposit for individuals and Remote Deposit Cheque (RDC) for merchants, where input of the cheque is performed self-service by customers with the use of their own devices, instead of physically going to the branch to deposit the cheque.

Some FIs and banks are already facing legacy hardware issues, and that motivates them to look for alternatives. This is especially true in the case of outward cheque clearing. The current procedure involves physically collecting the paper-based cheques and transferring them to one location for scanning and presentment. The process has naturally high dependencies on hardware. The concerns of FIs and banks surround these dependency relationships between the new software and the required hardware.

In one case study with similar concerns, TIS provided consultation for an end-to-end solution. In this case study, the central hardware was replaced by smaller hardware and distributed in different branches. Taking advantage of the scalability of our eFLOW Cheque software, the specific needs of the bank's requirements were easily addressed, and the mode of operation has now evolved into something that is more sustainable and efficient.

NOTEWORTHY TRENDS



- *Customer experience: Mobile cheque deposit for individuals and Remote Deposit Cheque for corporate users with their own device, without being present at the branch to deposit cheques.*
- *Scalable solution: Scanning hardware centrally located is replaced by smaller scanners distributed in different branches to address bank-specific requirements.*



4. Conclusion

Manual processing of paper-based cheques and outdated Cheque Processing Systems are clearly an impediment to business success, and there is resistance to change. However, if FIs and banks continue with the current systems, they will soon realize the pain of losing market share from not innovating this traditional payment method. Although cheque volumes are significantly decreasing yearly, cheques will not go away completely for some time. FIs and banks must establish a plan for how to reallocate resources to maintain revenues.

TIS technology is designed to provide:

- Better control over the entire process
- Improved overall fraud prevention efforts
- Cheque clearing information readily available
- Reduction of costs and improved productivity
- An open platform that is highly customizable and adaptable to specific needs



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