The University of Hong Kong

Final Report for
FITE4801 Final Year Project

In-depth Study on the Introduction and Application of e-HKD in Hong Kong

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Abstract

The rapid global adoption of retail CBDCs presents Hong Kong with both an opportunity to modernize its payment systems and a challenge to implement e-HKD effectively, given public unfamiliarity and technical complexities. This study explores strategies for the effective introduction of e-HKD and identifies high-impact future applications to enhance Hong Kong's payment ecosystem. Our methodology combines a literature review of China's e-CNY implementation, a survey of Hong Kong citizens' awareness and acceptance of e-HKD, and follow-up interviews to gather nuanced insights. Findings reveal three critical success factors: (1) incentive programs to drive adoption, (2) seamless interoperability with existing payment systems, and (3) a graduated rollout prioritizing government-led use cases paired with public education. For long-term traction, we identify three promising applications: public transport integration, cross-border interoperability, and smart contract-enabled government-to-person payments. These use cases not only maximize user engagement but also highlight e-HKD's efficiency gains, such as reduced transaction costs and programmable functionality. By aligning implementation with citizen needs and technical feasibility, Hong Kong can position e-HKD as a cornerstone of its digital economy.

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Contents

List of Figures

List of Tables

Abbreviations & Acronyms

AE	Access Enabler
BIS	Bank for International Settlements
CBDC	Central Bank Digital Currency
E-CNY	Digital Renminbi
E-HKD	Electronic Hong Kong Dollar
ETC	Electronic Toll Collection
FPS	Faster Payment System
G2P	Government-to-person
GBA	Greater Bay Area
HKMA	Hong Kong Monetary Authority
KYC	Know Your Customer
NFC	Near-Field Communication
PBOC	People's Bank of China
SME	Small and Medium Enterprise
RMB	Renminbi

1. Introduction

1.1 Background

1.1.1 Current retail CBDC development around the world

The rapid evolution of financial technology has prompted central banks worldwide to explore the potential of Central Bank Digital Currencies (CBDCs). As shown in Fig 1.1, among the 134 countries tracked, 47 countries have launched CBDCs or are at the pilot stage, while 59 of them are at the development or research stage, reflecting the growing attention on CBDCs.

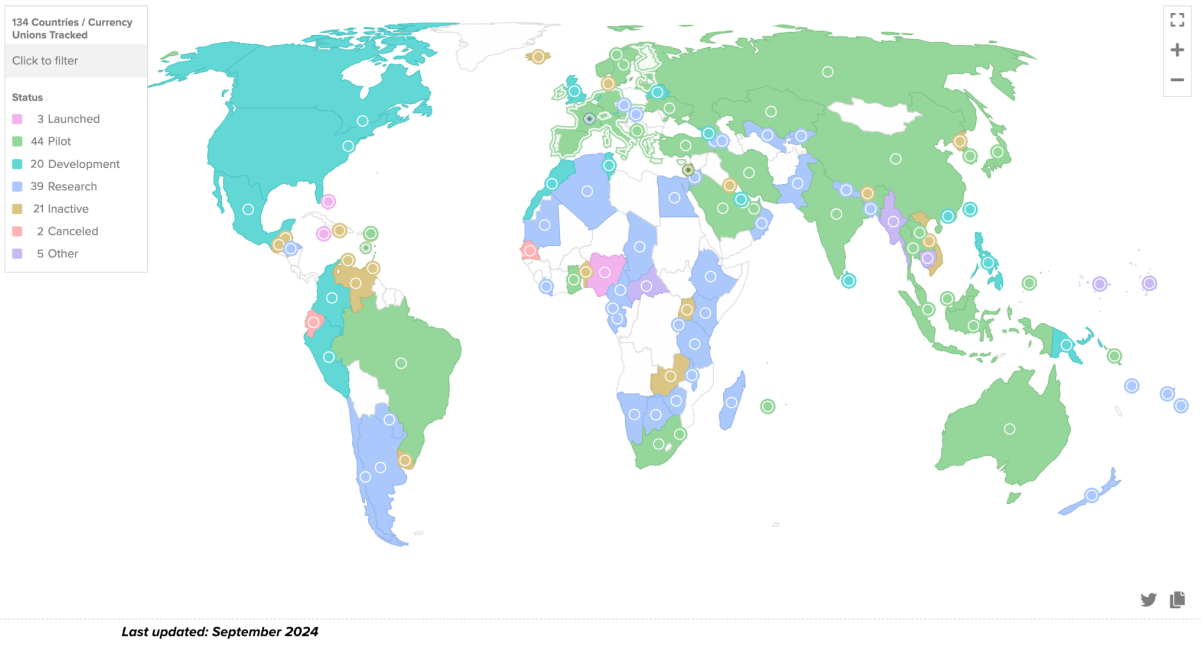

Fig 1.1 CBDC Development Around the World (Atlantic Council, 2024)

In particular, the development of retail CBDC has been rapid. According to a 2021 survey conducted by the Bank for International Settlements (BIS), 90% of participating central banks are engaged in CBDC initiatives, with work on retail CBDCs being more advanced than that on wholesale CBDCs (Kosse & Mattei, 2022). As of September 2023, Project Sela—a joint experiment by the BIS and the central banks of Hong Kong and Israel—has demonstrated the feasibility of a retail CBDC ecosystem that combines accessibility, competition, and robust cybersecurity while maintaining the key advantages of physical cash (BIS Innovation Hub et al., 2023).

In short, global interest in retail CBDCs is increasing, with significant advancements demonstrated by initiatives like Project Sela.

1.1.2 Development of retail CBDC in Hong Kong

Building on this foundation, retail CBDCs have received much attention of late, with extensive research conducted on their structure and cybersecurity concerns. The Hong Kong Monetary Authority (HKMA) has launched projects on e-HKD (Electronic Hong Kong Dollar), a retail CBDC aimed at digitizing Hong Kong's financial landscape. Therefore, a study on the practical introduction and future applications of e-HKD is essential.

To investigate the viability of issuing an e-HKD for individuals and enterprises, the HKMA launched Project e-HKD in June 2021 (HKMA, 2024). This project addresses both technical and policy aspects. The initiative was refined as e-HKD+ in September 2024 to widen its scope and incorporate a thorough analysis of the digital money ecosystem. The HKMA also worked with industry partners to explore creative applications of e-HKD through the e-HKD Pilot Programme (HKMA, 2024) and participated in international forums on CBDC. However, as of right now, no policy decision has been made regarding the introduction of e-HKD.

1.2 Motivation

As FinTech students, we frequently encounter the concept of CBDCs, which has become a compelling topic in both academic and professional discussions. The potential of retail CBDCs to transform financial systems and enhance payment efficiency has driven interest in projects related to Hong Kong's future financial and digital landscape. With the HKMA exploring the e-HKD, we are eager to investigate how this initiative can be practically introduced and utilized in the future.

This study aims to explore the current development and potential applications of e-HKD specifically within the retail sector, thus providing insights on the measures to introduce e-HKD. By examining these aspects of the e-HKD, we hope to gain valuable insights that will not only enhance our professional knowledge but also deepen our understanding of the real-world applications of this emerging technology.

1.3 Objectives

This project aims to provide a comprehensive analysis of e-HKD and suggestions for the introduction and applications of e-HKD by referencing Digital Renminbi(e-CNY), a retail CBDC operating in China. The project scope includes two parts, the introduction of e-HKD, and future applications of e-HKD.

The objectives of the study are as follows:

1. To provide suggestions regarding the introduction e-HKD.
2. To identify potential applications of e-HKD.

1.4 Project contribution

The study will examine the current development of e-HKD, which is crucial for understanding its future trajectory in Hong Kong. By comparing e-HKD with e-CNY and analysing the findings of Project Sela, the study will draw valuable lessons from another operational retail CBDC. This analysis will highlight best practices and potential pitfalls, informing the implementation strategy and framework for e-HKD. Additionally, e-CNY serves as an excellent reference for e-HKD, offering insights into future potential applications.

Furthermore, the study aims to provide actionable recommendations for banks, financial institutions, and the government regarding the introduction of e-HKD. These recommendations will help stakeholders navigate the transition to digital currency, ensuring a smooth and successful implementation. Ultimately, this will empower financial institutions to adapt to the evolving landscape and capitalize on the opportunities presented by e-HKD

1.5 Report outline

This report is structured into five chapters. Chapter One provides an overview of retail CBDCs and reviews previous studies on e-HKD conducted by the HKMA. Chapter Two outlines the research methodology used in this project. Chapter Three presents the findings, highlighting insights from the literature review, survey results, and interviews. Chapter Four summarizes the

key results, addressing the study's objectives. Finally, Chapter Five concludes the report by discussing the challenges encountered and suggesting areas for future improvement.

2. Methodology

This chapter presents methodologies we will use to achieve the objectives. This report will use a mixed approach, including a survey, follow-up interviews and literature review.

2.1 Literature review on e-HKD, e-CNY and Project Sela

As the e-HKD initiative in Hong Kong is still in the pilot phase, the introduction of e-HKD cannot be specifically discussed based on experience. However, some studies regarding e-HKD have been conducted by the HKMA. Therefore, this project will briefly examine the current progress of the development of e-HKD in Hong Kong.

Thus, the successful implementation of e-CNY in China can help us understand the experiences and strategies used for the future development of e-HKD. Specifically, this report will analyze the e-CNY's current development, roll-out strategies and the current applications.

Project Sela, a collaborative project led by the BIS in partnership with the central banks of Hong Kong and Israel, also provides us with meaningful insights on how to operate an accessible, scalable and secure retail CDBC system. In this report, we will discuss their proposed framework for such digital currency.

2.2 Survey on public perception

A survey will be conducted to assess public awareness and potential usage of the e-HKD. By targeting individuals aged 18 and older and aiming for at least 80 responses, the online survey will gather comprehensive data that will help formulate recommendations for e-HKD in Hong Kong. The insights gained will be instrumental in understanding public sentiment and guiding future strategies for e-HKD implementation.

Survey question scope

1. Public Acceptance: Questions will assess the general perception of e-HKD among respondents, including their willingness to adopt digital currency and any concerns they may have regarding its use. Key data needed includes demographic information, prior experience with digital currencies, and specific attitudes toward the benefits and risks of e-HKD.
2. Potential Usage: The survey will explore scenarios in which individuals might use e-HKD, such as for daily transactions, online purchases, or cross-border payments. Data required for this section will include respondents' current payment behaviors, preferences for digital versus traditional payment methods, and anticipated use cases for e-HKD.

2.3 Follow-up interview of survey participants

The follow-up interviews will delve deeper into the needs, concerns, and expectations of potential e-HKD users in Hong Kong. By engaging with survey respondents, we aim to validate and expand on survey findings regarding public acceptance and potential usage of e-HKD. Additionally, the interviews will help identify unmet needs in Hong Kong's current payment ecosystem that e-HKD could address, such as gaps in convenience, security, or accessibility. Understanding barriers to adoption—such as trust issues, usability challenges, or privacy concerns—will allow us to explore potential solutions and refine the digital currency's design. Furthermore, these interviews will gather qualitative insights on how e-HKD can be optimally designed and positioned to maximize adoption, ensuring it aligns with user preferences and real-world payment behaviours.

Participant selection will focus on recruiting a diverse mix of respondents based on survey results, ensuring representation across key demographics such as age, income, and digital literacy levels. To capture a balanced perspective, the interviews will include participants ranging from enthusiastic and skeptical, allowing for a comprehensive understanding of varying attitudes toward e-HKD.

These follow-up interviews, each lasting approximately 5 to 10 minutes, will be able to maintain a flexible yet focused discussion on key themes. These interviews will be conducted via Zoom or in-person, depending on respondent preferences, to maximize participation and convenience. This approach will facilitate detailed responses while ensuring efficient data collection for analysis.

2.4 Summary

This chapter proposed the methods used in our project. The survey design, interview objectives and details of our literature review on e-CNY were discussed. The next section will show the findings of the project.

3 Findings and discussion

This chapter presents the findings of the project. Section 3.1 provide the findings from the literature review conducted. Sections 3.2 and 3.3 shows our survey results and interview findings. Sections 3.5 and 3.6 end this chapter by presenting the challenges and summarizing our results.

3.1 Key findings from Literature Review

3.1.1 Current development of e-HKD

The current development of the e-HKD is progressing through its pilot stage, with the second phase of the e-HKD Pilot Programme officially commencing on September 23, 2024. This phase involves collaboration with 11 local financial institutions to explore innovative use cases centered around three key themes: the settlement of tokenized assets, programmability, and offline payments (HKMA, 2024). These themes emerged from insights gained during Phase 1 of the pilot programme, which demonstrated that the e-HKD could significantly enhance efficiency in these areas.

For instance, Hang Seng Bank is participating in this phase to investigate how e-HKD can facilitate the development of an open, efficient, and scalable digital rewards system. This

initiative exemplifies the practical applications being tested that could potentially transform customer engagement and loyalty programs in the digital currency landscape.

The HKMA aims to leverage Phase 2 to gain deeper insights into the operational challenges associated with implementing a digital currency. This includes addressing compliance, privacy, and security concerns that may arise as e-HKD is integrated into existing financial systems. The findings from this phase will be crucial for understanding how to design and operate a digital money ecosystem that encompasses both publicly issued currencies like the e-HKD and privately issued digital assets.

Overall, the HKMA's strategic approach to introducing e-HKD through a phased pilot program not only aims to explore innovative use cases but also seeks to address critical operational challenges. By engaging with industry participants and focusing on real-world applications, the HKMA is laying a solid foundation for potentially integrating e-HKD into Hong Kong's financial ecosystem in a way that maximizes its benefits while mitigating risks.

3.1.2 Project Sela's breakthrough with use of Access Enablers (AEs)

Project Sela is a collaborative project led by the BIS in partnership with the central banks of Hong Kong and Israel, it outlines the design and the implementation of accessible, scalable and secure retail CBDC system.

At the heart of Project Sela, a novel intermediary named the Access Enabler (AE) is designed to provide direct access to end users without ever holding or controlling their retail CBDC balances (BIS Innovation Hub et al., 2023). It performs serval essential functions in the system, including onboarding customers, endorsing transaction requests, and ensuring security of the blockchain ledger.

Figure 3.1 presents an example for a transaction between a merchant and a customer Alice within this framework, initiated by the merchant to facilitate a transaction from Alice. The key processes are as follows:

1) The merchant sends a message with a request for payment from Alice to their AE.

2) The merchant's AE runs appropriate compliance check and endorses the request by co-signing and submitting it to the retail CBDC app maintained by the central bank.
3) The retail CBDC app forwards the request to Alice's AE.
4) Alice's AE forwards the request to Alice for her approval.
5) Once Alice approves, the Alice's AE endorses and respond to the retail CBDC app.
6) The retail CBDC app then request the ledger to execute the transaction. After the ledger validates the correct signatures, it executes the transaction, an action of debiting Alice's retail CBDC account and crediting the merchant's CBDC account.

Finally, this sequence of message moves value from Alice's retail CBDC wallet to the merchant's wallet as indicated by red arrow in Figure 3.1.

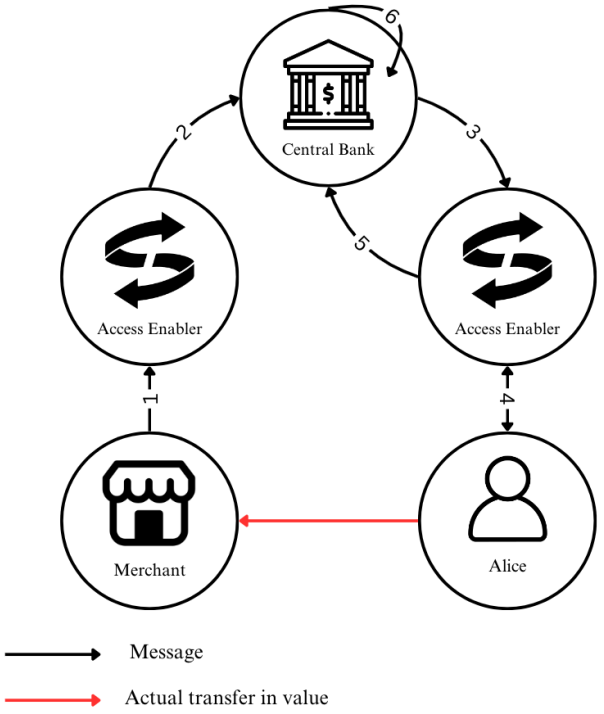

Fig 3.1 A proposed retail CBDC system for transaction between a merchant and a customer

The design of Project Sela not only enhances accessibility but also addresses critical issues related to cybersecurity and operational risks associated with digital currencies. By utilizing a two-tier system where the central bank operates the retail ledger while AEs handle customer

interactions, Project Sela aims to combine the benefits of traditional cash—such as instant settlement and low-cost transactions—with modern technological advancements.

Project Sela represents a significant step forward in exploring how retail CBDCs can be structured to enhance user experience while ensuring security and compliance. The introduction of AEs as intermediaries facilitates broader access to digital currency services, promoting competition and innovation in the financial sector.

3.1.3 E-CNY as Case Study

E-CNY serves as a compelling reference point for the development of the e-HKD due to several parallels in their objectives, functionalities, and implementation strategies. Understanding the evolution and current status of e-CNY can provide valuable insights into how the e-HKD might be structured and adopted in Hong Kong.

3.1.3.1 Current Development of e-CNY

E-CNY is a digital version of fiat currency in China, issued by the People's Bank of China (PBOC) in 2019. It acts as the substitute for the circulation of money (M0), coexisting with physical cash and other forms of digital payment. As a retail CBDC, it mainly serves the demand for retail payment, with a mission to improve efficiency and reduce the cost of retail payment.

Currently, e-CNY is piloting in 26 cities in China, including Shenzhen, Shanghai and Beijing. As by July 2024, it has been reported by reported that the cumulative transaction value had reached 7.3 trillion yuan with 180 million wallet users. As shown in figure 3.2, it has showcased exponential growth comparing to only 100 billion yuan in August 2022 (Mu, 2024). However, when compared to China's total population, the number of wallet users represents only 10% of the entire population.

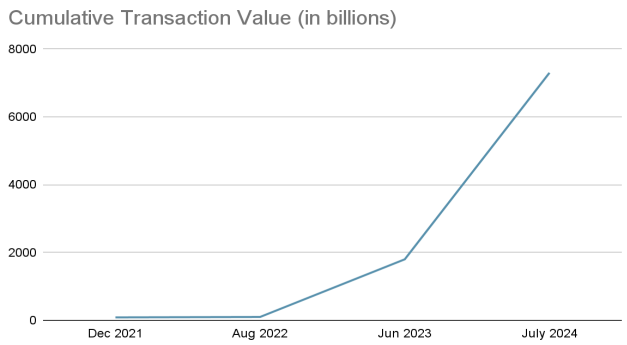

Fig 3.2 Cumulative Transaction Value of e-CNY (in billion yuan)

The e-CNY framework, involves the distribution of digital currency to authorized operators, including the six largest state-owned banks and two internet banks. This system incorporates a wallet matrix that varies by levels of Know Your Customer (KYC) compliance, allowing for increased transaction limits as KYC levels rise (Mu, 202124123). For example, a Level 4 wallet, which offers the lowest transaction limit and the highest level of anonymity, can be registered using just a phone number. In contrast, a real-name wallets, requires different authentication methods such as phone numbers, ID cards, facial recognition, bank accounts, and in-person verification. Their difference is showcased by their transaction limit, 2,000 HKD for a Level 4 wallet, while real-name wallets have no such limit.

3.1.3.2 Introduction Strategy of e-CNY

China implemented four core strategies to expand its e-CNY user base: mandated public sector adoption, targeted incentive campaigns, seamless ecosystem integration, and a pilot-centric rollout strategy. These approaches collectively contributed to the digital currency's growing adoption.

China strategically mandated e-CNY adoption in government-related transactions to create an instant user base. Most notably, Beijing implemented e-CNY salary payments for civil servants, with 14% of municipal district employees receiving their May 2023 wages in digital yuan (Zhou, 2023). This top-down approach ensured immediate uptake from a captive audience while normalizing CBDC usage. The policy extended to tax payments, utility bills, and subway fares, embedding e-CNY into essential services in pilot cities. By prioritizing government-to-person

(G2P) payments, China created organic network effects—as public sector workers spent their e-CNY salaries, private merchants had incentive to accept it.

China successfully boosted e-CNY adoption through targeted incentive programs that created immediate value for users. A key initiative was the cross-border e-CNY card jointly launched by Bank of China and Octopus, offering Hong Kong residents 20% discounts at Luohu merchants like hotels and restaurants, with total subsidies capped at 200 Renminbi (RMB) per user (Sing Tao Daily, 2023). During holidays, cities rolled out massive campaigns - Shenzhen distributed 1 billion RMB in dining vouchers, while Hangzhou issued 800,000 retail vouchers exclusively through e-CNY wallets. These incentives were strategically deployed across high-frequency scenarios including metro fares, flight bookings, and partnered mall chains. The results were striking: 90% voucher redemption rates within 48 hours in pilot cities, stimulating growth in circulating e-CNY (Beijing Municipal Government, 2023). However, challenges emerged in sustaining engagement post-campaigns, as some merchants stopped actively promoting e-CNY after initial promotions, highlighting the need for ongoing incentive structures beyond one-off subsidies. The success of these programs demonstrates how carefully designed financial incentives can effectively drive initial adoption of digital currencies.

Unlike standalone CBDC projects, e-CNY was designed as a "layer" within existing payment infrastructures. Users could access it through dominant platforms like WeChat Pay and Alipay without downloading new apps, leveraging familiar interfaces. For offline transactions, the system supported Near-Field Communication (NFC) tap-to-pay functionality compatible with 98% of China's POS terminals (People's Bank of China, 2021). This interoperability lowered switching costs dramatically; merchants could accept e-CNY without hardware upgrades, while users maintained their preferred payment habits.

The People's Bank of China (PBoC) implemented a phased geographic expansion, testing specific use cases in each pilot zone. Shenzhen focused on transit systems, Suzhou on e-commerce integration, and Chengdu on cross-border remittances. This approach enabled localized optimization—refining systems through regional testing before national implementation. For instance, after successful wage payment trials in Beijing, the program

expanded to other cities like Suzhou. Pilot cities served as testing grounds for diverse applications: the 2022 Winter Olympics demonstrated foreigner-accessible wallets, while Xiongan experimented with smart contracts for utility payments. By the national launch, numerous scenarios had been rigorously tested, establishing best practices for various industries and regions.

The e-CNY's rollout strategies offer valuable lessons for Hong Kong's e-HKD implementation. By adapting these proven approaches, Hong Kong can facilitate a smoother introduction of its digital currency.

3.1.3.3 Current Applications of e-CNY

There are numerous applications of e-CNY to date, and Hong Kong can draw valuable lessons from the e-CNY experience as it explores e-HKD. The following table shows some of the key use cases of e-CNY across different cities in China.

Table 3.1 Key Use Cases of e-CNY

Regions	Key Use Cases
Beijing	- Public transportation - Insurance - Real estate finance (mortgages, deposits, subsidies) - Wage payment of civil servants
Guangdong	- Cross-border payments between Hong Kong and China - Public transportation - Tax payment
Jiangsu	- Smart contract in the regulation of prepay funds - Cross-border applications (e.g. cross-border tax payment) - Wage payment of civil servants

Shanghai	- Local government bond issuance - Public transportation
Xiongan New Area	- Digital identity linked with wallet - Comprehensive application ecosystem including healthcare, education, utility bills and transport
Zhejiang	- Smart transportation with electronic toll collection (ETC) payment - Supply chain management with closed-loop find supervision - Land transaction deposit payment

E-CNY has seen widespread adoption across China, with transportation emerging as one of the most common and strategically important use cases. In Beijing, the e-CNY's integration into public transport builds on its successful deployment during the 2022 Winter Olympics, where NFC-enabled hard wallets allowed tourists and residents to "tap-and-pay" across metro and bus networks (Beijing Municipal Government, 2022). Similarly, Shanghai has pioneered a seamless "one-code-pass" system, enabling commuters to use e-CNY across metro, buses, ferries —a model now being replicated in other cities (Shanghai China News, 2024). Guangdong, leveraging its proximity to Hong Kong, has focused on cross-border transit applications, with the Shenzhen metro system supporting e-CNY payments for mainland and Hong Kong travellers, facilitating smoother economic integration in the Greater Bay Area (GBA) (Hua , 2023).

Beyond urban centers, Xiongan New Area has taken a holistic approach by embedding e-CNY into rural transport networks, where "one-card-for-all" hard wallets are used for buses and ferries, bridging the urban-rural digital divide (Xiongan New Area Management Committee, 2025). Meanwhile, Zhejiang has applied e-CNY to smart highway tolls (ETC), using smart contracts to automate reconciliation, a solution that reduces administrative costs by 30% compared to traditional methods (Hangzhou News, 2025).

While transportation dominates, other key applications reveal regional priorities. Beijing and Shanghai are testing e-CNY in high-value financial transactions (e.g., insurance, local bonds), while Jiangsu leads in smart contract innovation, using e-CNY for prepaid fund regulation and cross-border tax payments.

By referencing these applications, Hong Kong can effectively position the e-HKD as a valuable tool for enhancing its financial infrastructure and promoting innovation.

3.2 Survey results

As of now, we are in the process of analyzing survey results for our research project. The survey aimed to gauge public perception regarding the e-HKD, collecting responses from a total of 81 participants. The demographic data reveals an age distribution, majority (56.8%) falling within the 26-35 age range. Employment status shows a significant portion of respondents are students (40.7%) and full-time employees (46.9%). In terms of monthly income, over half (53.1%) earn less than HK$10,000, while educational attainment is notably high, with 81.5% holding a bachelor's degree or higher. This demographic insight provides a foundational understanding of the survey's respondents, essential for interpreting their views on digital currency.

The survey consists of two parts. The first part assesses public awareness and acceptance of e-HKD. Understanding whether the public is receptive or cautious about adopting a new digital payment method can provide valuable insights for policymaking during e-HKD's introduction. The second part explores potential applications of e-HKD in Hong Kong, focusing on how citizens might utilize this payment channel. We will also evaluate their satisfaction with existing payment methods and their interest in alternatives. These findings will help identify practical use cases for e-HKD.

The survey questionnaire is designed to capture a comprehensive range of insights, and the complete set of questions and responses are included in Appendix A for reference.

3.2.1 Citizens Lack Understanding on Concepts of CBDC

One of the major insights from the survey is that to effectively introduce the e-HKD, banks should prioritize public education initiatives, as survey results indicate that 61.5% of respondents lack knowledge about CBDCs and 70.4% are unfamiliar with e-HKD. Implementing educational campaigns through workshops, informational websites, and social media outreach can significantly enhance awareness and understanding among potential users.

Additionally, nearly half of the respondents expressed concerns about existing payment methods, so addressing dissatisfaction with current payment methods is crucial. Leveraging the e-HKD's advantages such as enhanced convenience, lower transaction costs, and improved transaction speeds can help to alleviate these issues. Furthermore, targeted marketing strategies should be developed to highlight the benefits of e-HKD, particularly since over half of the respondents prefer digital payments for their convenience and speed. Lastly, incorporating feedback regarding security risks and privacy issues will be essential for building trust and encouraging adoption.

3.2.2 Citizens Interest Use Case of E-HKD

The survey results reveal several promising applications for e-HKD that banks can explore. Notably, 44.4% of respondents indicated they would use e-HKD for daily transactions, while 39.5% expressed interest in using it for online purchases. This suggests that integrating e-HKD into everyday financial activities could position it as a viable alternative to cash and traditional payment methods.

Additionally, the interest in using e-HKD for cross-border payments highlights its potential in international remittances and trade, which could streamline processes and reduce costs. The significant demand for peer-to-peer transfers also points to an opportunity for banks to create a platform that facilitates easy and efficient money transfers among individuals. Finally, banks should consider financial inclusion initiatives by partnering with local businesses and communities to promote e-HKD adoption, especially among demographics that would benefit from improved access to financial services.

3.3 Follow-up Interview

To gain deeper insights into public perspectives on e-HKD, we conducted follow-up interviews with three individuals representing diverse backgrounds and viewpoints.

1. Jason, a 33-year-old Small and Medium Enterprise (SME) owner, is optimistic about e-HKD's rollout and expressed a strong willingness to adopt it.
2. Christine, a 52-year-old housewife, is hesitant about adopting another payment method, as she believes it may complicate her daily transactions.
3. Justin, a 25-year-old engineer, maintains an ambivalent stance, stating that his support for e-HKD would depend on its implementation framework.

By selecting interviewees with varying demographics and perspectives, this interview captures a broader spectrum of public opinion, enabling a more comprehensive analysis of e-HKD's public perspective. Also, to ensure that all participants have the same understanding on e-HKD, we have introduced the same materials of e-HKD to them.

The follow-up interview is designed to capture a more in-depth insights, and the complete transcripts are included in Appendix B for reference.

3.3.1 Key Findings from Follow-up Interview

Through in-depth interviews with a SME owner, a housewife, and a tech-savvy engineer, three critical insights emerged regarding the potential adoption and implementation of e-HKD in Hong Kong. These findings highlight both the opportunities and challenges facing this digital currency initiative.

First, incentives prove crucial for driving adoption across all user segments. Jason, the SME owner, emphasized that e-HKD must deliver tangible benefits to justify switching from existing payment methods, particularly for cross-border transactions "If implemented right, e-HKD could be revolutionary - but only if it solves cross-border payment inefficiencies." Christine, representing more cautious users, stated she would need immediate rewards like a "welcome bonus" to consider adoption, while Justin, the engineer, stressed the need for competitive perks

matching credit card benefits. These responses collectively demonstrate that financial incentives and user benefits must be central to e-HKD's rollout strategy.

The second key insight reveals that interoperability fundamentally determines the currency's utility. Jason was adamant that e-HKD's value depends on its ability to function beyond Hong Kong's borders with overseas business partners. Christine's insisted the system must be as simple and ubiquitous as Octopus, working seamlessly at all her regular shopping locations. Justin added the technical perspective, emphasizing that e-HKD must integrate smoothly with existing digital wallets to avoid fragmentation. These findings underscore that seamless integration with both international systems and local payment ecosystems will be critical for e-HKD's success.

Finally, the interviews uncovered significant potential for future applications that could drive long-term adoption. Jason saw promise in programmable features for business efficiency, though he noted the need for robust security measures. Christine, despite her initial hesitation, acknowledged that compelling use cases like fee-free international remittances or discounts in utility bill payment could motivate her adoption. Justin envisioned e-HKD enabling a fully cashless future where phones replace all physical payments. These perspectives suggest that while immediate adoption depends on solving basic usability and incentive challenges, e-HKD's ultimate success may hinge on its ability to enable innovative financial applications that go beyond traditional payment methods.

Together, these insights paint a comprehensive picture of e-HKD's adoption landscape, highlighting the need for a phased implementation strategy that addresses immediate user concerns while developing e-HKD’s long-term value proposition. The findings suggest that success will require careful balancing of incentives, interoperability, and innovative functionality tailored to different user needs.

3.4 Summary

This chapter presents our findings for the report, sourced from literature review, survey conduction and interview. Next chapter will present the summarized results of the findings, challenges, and future research directions.

4 Results

This chapter presents the results of the project regarding the two objectives stated. Section 4.1 provides suggestions to introduce e-HKD. Section 4.2 identifies the potential applications of e-HKD. Sections 4.3 and 4.4 end this chapter by presenting the challenges and future directions.

4.1 Suggestions to Introduce e-HKD

The research findings suggest four key strategies that could facilitate successful e-HKD adoption in Hong Kong. First, the research underscores that financial incentives must form the foundation of the e-HKD rollout strategy, as evidenced by both the e-CNY experience and our interviewee responses. Interviewees emphasized that financial incentives would strongly influence their decision to adopt e-HKD, with some noting they would only consider using it if offered discounts. This aligns with successful e-CNY initiatives like Shenzhen's metro discounts and e-CNY consumption vouchers, which achieved 90% redemption rates. The HKMA could implement similar targeted programs, particularly focusing on high-frequency use cases identified in our survey, where respondents expressed interest in using e-HKD for daily transactions. Incentive programmes likes Mass Transit System (MTR) fare discounts, Octopus cashback rewards, or tax rebates for early adopters can be carried out. To drive successful adoption, Hong Kong should first implement aggressive introductory offers matching existing payment methods' discounts during the initial 6-12 months, specifically targeting high-frequency use cases like transport and bills to establish user habits. These time-bound, high-value incentives aims to motivate initial switching from traditional payment systems. Once adoption reaches critical mass, the focus should shift to sustaining engagement through ongoing but reduced rewards, such as tiered cashback programs based on usage volume or exclusive merchant partnerships, ensuring long-term retention while gradually reducing

subsidy costs. This phased approach balances short-term attractiveness with sustainable ecosystem development.

Second, the technical architecture of e-HKD must prioritize frictionless integration with Hong Kong's mature payment infrastructure. Two key integration points emerge from our findings:

1. Consumer Platforms: Consumer-facing platforms should embed e-HKD within widely used services like FPS, Octopus, and major banking apps, mirroring e-CNY's seamless integration with WeChat Pay and Alipay. This approach eliminates the need for standalone apps, reducing adoption barriers by aligning with entrenched user behaviours.
2. Merchant Systems: Merchant systems must support universal compatibility via dual NFC/QR code standards, ensuring all POS terminals—from chain stores to street vendors—can accept e-HKD without costly upgrades. Incentivising merchants to accept e-HKD as payment.

This multi-tiered integration serves diverse user needs: tech-savvy audiences benefit from instant interoperability with their preferred apps, while cautious adopters retain familiar touchpoints like Octopus cards. By bridging gaps between legacy and digital systems, Hong Kong can cultivate an inclusive, future-proof CBDC ecosystem—positioning e-HKD not as a disruptive change, but as a natural evolution of the city's financial infrastructure.

Third, while China's e-CNY implementation mandated public sector adoption, Hong Kong's e-HKD rollout should adopt a more balanced approach that combines encouragement with consumer choice. This graduated implementation strategy serves dual purposes: it respects Hong Kong's established market-driven financial ethos while still creating the positive network effects demonstrated in e-CNY adoption, where public sector usage naturally stimulated private merchant acceptance without requiring coercive measures. For example implementing optional e-HKD disbursement for civil servant salaries, introducing digital tax rebates and utility bill discounts and executing a progressive rollout across essential government services including transport, healthcare and education. By positioning e-HKD as a value-added option rather than a requirement, this progressive approach acknowledges Hong Kong residents' preference for

financial autonomy while still leveraging the demonstrative effect of government adoption to build ecosystem momentum.

Finally, comprehensive public education must precede full implementation, as our survey revealed significant knowledge gaps regarding the concepts of CBDCs and e-HKD. The e-CNY rollout demonstrated the effectiveness of combining informational campaigns with practical experience, Hong Kong could similarly implement workshops and pilot programs to build understanding. This education should highlight benefits particularly valued by our respondents: enhanced convenience and faster transactions, while transparently addressing security concerns. The current e-HKD Phase 2 pilot program held by the HKMA exploring tokenized assets and programmability could also serve as an ideal platform for such public education initiatives. Such a multi-pronged educational approach would address both the knowledge gap and adoption barriers identified in our research.

These strategies collectively address the key findings from our research while adapting successful approaches from e-CNY to Hong Kong's unique context. By combining incentives, interoperability, gradual public sector integration, and education, the HKMA can create favourable conditions for e-HKD adoption across different user segments identified in our study - from tech-savvy adopters like Justin to more cautious users like Christine.

4.2 Future Applications of E-HKD

e-CNY has shown success in numerous areas while implementing it in different regions, like public transportation, cross-border applications and smart contracts on Government-to-person payments (G2P).

Hong Kong's public transportation system currently provides multiple payment options, including Octopus cards, contactless bank cards, and QR code solutions. While these methods serve local residents reasonably well, several limitations create challenges for users. The Octopus card system, though efficient for regular commuters, presents accessibility barriers for tourists who must purchase and top-up physical cards. Similarly, QR code solutions require visitors to download and authenticate new mobile applications - a time-consuming process that

discourages spontaneous use. Perhaps most significantly, payment methods remain inconsistent across different transport modes. While the MTR system supports multiple digital payment options, Hong Kong's other transport modes present payment inconsistencies, for example taxis remain cash-only, while minibuses operate on a dual cash/Octopus system. This fragmentation creates unnecessary complexity for both residents and visitors navigating the city's transport network

Our research indicates strong potential for e-HKD adoption in Hong Kong's transportation sector, with survey respondents demonstrating particular willingness to use it for daily transactions. The digital currency could revolutionize the current system by introducing an accessible mobile-based platform that eliminates physical card requirements while preserving the simplicity that interviewees value in Octopus - especially important for addressing visitor pain points, just as how e-CNY increased tourist payment efficiency in Shanghai. Beyond accessibility improvements, e-HKD offers the unique advantage of creating standardized digital payment functionality across all transport modes, particularly benefiting currently underserved sectors like taxis and minibuses that remain heavily cash-dependent. This solution would strategically combine the familiar ease-of-use of Octopus with enhanced digital features, directly addressing the fragmentation issues identified in our research. With the use of e-HKD, we are potentially transforming Hong Kong's payment infrastructure into a more efficient and accessible system without compromising the convenience and reliability.

Cross-border payments have long presented significant challenges for Hong Kong's financial system, particularly in terms of cost efficiency and processing times. As noted by our interviewee, the current reliance on traditional wire transfers through the Society for Worldwide Interbank Financial Telecommunication (SWIFT) network results in substantial financial burdens, with transaction fees often reaching hundreds of Hong Kong dollars and settlement periods extending up to five business days. These inefficiencies create particular difficulties for SMEs, where accumulated transaction costs can meaningfully impact operational margins.

The demonstrated success of e-CNY in improving cross-border payments—particularly in the GBA, where it reduced transaction costs and enabled near-instant settlement via systems like

mBridge—provides a compelling model for e-HKD adoption in Hong Kong (Bank for International Settlements, 2022). By leveraging distributed ledger technology, e-HKD could offer similar efficiencies, including minimal processing fees, 24/7 operation, and programmable features like automated FX conversions at competitive rates, solving the problem when using the SWIFT network. Crucially, its seamless interoperability with both e-CNY and Hong Kong's FPS would create a unified cross-border solution for retail and wholesale transactions. The e-HKD Phase 2 pilot program's current exploration of cross-border applications is particularly promising, as it tests e-HKD's seamless interoperability overseas. Combining these technical advantages with Hong Kong's strong regulatory framework and global financial connectivity, e-HKD is well-positioned to address existing payment inefficiencies while reinforcing the city's role as an international financial hub.

Hong Kong's current use of smart contracts remains largely experimental, confined to limited blockchain trials in trade finance and property transactions. Yet the demonstrated success of e-CNY's programmable features in mainland China reveals significant untapped potential. In Jiangsu province, for instance, e-CNY smart contracts have transformed prepaid markets by automatically releasing funds only upon verified service completion—reducing consumer disputes by in education services and in retail sectors (Jiangsu Provincial People's Government, 2025)

Our research indicates e-HKD could drive significant innovation in Hong Kong's financial ecosystem through its programmable capabilities, which could automate high-value processes such as trade finance documentation between GBA businesses, tax payment and government subsidy distributions. For the e-HKD to achieve widespread adoption, building public familiarity and trust is critical—and G2P payments offer the ideal starting point. By distributing subsidies, tax refunds, or social benefits in e-HKD automatically using smart contract, the government can encourage public participation, as citizens receiving direct digital payments gain hands-on experience, fostering confidence in the currency. This, in turn, drives merchant acceptance, since businesses are more likely to adopt e-HKD as a payment method when a growing user base holds it. Additionally, G2P use cases—such as welfare disbursements or stimulus payouts—demonstrate real-world utility, ultimately automating complex processes

like conditional welfare payments or instant tax rebates, streamlining government operations while reducing errors and administrative costs. By using smart contract on G2P transactions, the e-HKD gains immediate relevance for citizens and merchants, creating a natural adoption pathway before expanding into broader financial ecosystems.

The e-HKD demonstrates significant potential to revolutionize three critical areas of Hong Kong's financial ecosystem: public transportation, cross-border transactions, and G2P with smart contract applications. By addressing current pain points in the city's payment infrastructure, the digital currency could deliver transformative improvements in efficiency, accessibility, and innovation.

4.3 Challenges

In conducting this research, we encountered two primary challenges that shaped our methodological approach.

The first challenge stems from the pre-implementation status of e-HKD in Hong Kong. Since the digital currency has not yet been officially issued, we faced difficulties in evaluating its real-world effectiveness and adoption patterns. This limitation is particularly significant when attempting to assess operational performance or user acceptance metrics. To address this gap, we adopted a comparative case study approach, focusing on China's e-CNY as a reference point. By analysing the rollout strategies and application scenarios of e-HKD's mainland counterpart, e-CNY, we can derive valuable insights while acknowledging the contextual differences between the two systems. Furthermore, we redirected our research focus toward examining the potential applications and rollout framework of e-HKD, rather than attempting to measure its effectiveness prematurely.

The second challenge relates to the novelty of CBDC technology among the general public. Our survey revealed that most participants had limited understanding of e-HKD, with many confusing it with existing digital payment platforms like Faster Payment System (FPS) or Octopus. This knowledge gap presented both a research obstacle and an opportunity. To ensure data quality, we implemented a two-phase explanatory methodology: first collecting initial

reactions through surveys, then conducting follow-up interviews where we provided clear, standardized explanations of e-HKD's purpose and functionality. This approach allowed us to gather more informed responses while also measuring how comprehension affects perception. The educational component added depth to our findings by revealing how information accessibility might influence future adoption rates.

These methodological adaptations not only mitigated the research challenges but also provided unexpected insights for the project. The combination of comparative analysis and phased data collection offers a robust framework for studying emerging financial technologies before full-scale implementation.

4.4 Future Research Direction

Two critical avenues for further study emerge from this investigation. First, comprehensive research should examine the cybersecurity and regulatory compliance challenges specific to e-HKD implementation. Given the increasing sophistication of digital threats and the stringent requirements of financial regulation, such studies could explore: (1) cybersecurity measures in the proposed e-HKD architecture, (2) data privacy preservation mechanisms, and (3) anti-money laundering (AML) compliance frameworks tailored for a retail CBDC environment. It would be very valuable to dive deeper in the technical design and governance model of e-HKD before full-scale deployment.

Second, rigorous post-implementation evaluation should be conducted following any trial or official launch of e-HKD. Such research could take two complementary approaches: a success/failure analysis of the actual implementation to identify operational strengths and weaknesses, or alternatively, a precautionary study examining potential negative consequences that might warrant reconsideration of e-HKD adoption. The former approach would provide practical insights for iterative improvement, while the latter would serve as an important risk assessment tool, to form a comprehensive analysis.

These research would contribute to both the academic understanding of CBDCs and the practical development of Hong Kong's digital currency ecosystem. The cybersecurity research

would help establish necessary safeguards, while the implementation studies would provide evidence-based guidance for policymakers and financial institutions navigating the complex transition to digital currency systems.

5 Conclusion

The exploration of e-HKD's potential introduction and applications highlights both its transformative possibilities and the challenges that must be addressed for successful implementation. Drawing insights from the development of e-CNY and Project Sela, this study identifies key strategies for e-HKD adoption, including financial incentives, seamless interoperability with existing payment systems, gradual public sector integration, and comprehensive public education. Additionally, the research underscores promising applications for e-HKD in public transportation, cross-border payments, and smart contracts in G2P payments, which could enhance efficiency, accessibility, and innovation in Hong Kong's financial ecosystem.

However, challenges such as public awareness gaps and the absence of real-world e-HKD usage data necessitate further research, particularly in cybersecurity, regulatory compliance, and post-implementation evaluation. As Hong Kong progresses in its CBDC journey, future studies should focus on refining technical frameworks, assessing adoption barriers, and evaluating the long-term impact of e-HKD on the financial landscape. By addressing these considerations, Hong Kong can position itself as a leader in digital currency innovation while ensuring a secure, inclusive, and efficient transition to a cashless future.

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Appendix A: Survey questions

Title: Survey on Public Perception and Potential Usage of e-HKD 關於數碼港元（e-HKD）的公眾認知及潛在使用調查

We are BASc (FinTech) students from The University of Hong Kong (HKU) working on our final year project focused on the e-HKD (electronic Hong Kong Dollar). The aim of this survey is to assess public acceptance and potential usage of e-HKD among residents. Your insights will help us understand perceptions, willingness to adopt this digital currency, and how it might be utilized.
Thank you for taking the time to participate in our survey! Your feedback is invaluable to our research.

我們是香港大學 (HKU) 的金融科技學士（BASc (FinTech)）學生，正在進行以數碼港元（e-HKD）為主題的畢業專題研究。這項調查的目的是評估居民對數碼港元的接受程度和潛在使用情況。您的意見將幫助我們理解公眾的認知、對這種數字貨幣的接受意願，以及其的使用方式。
感謝您花時間參加我們的調查！您的反饋對我們的研究至關重要。

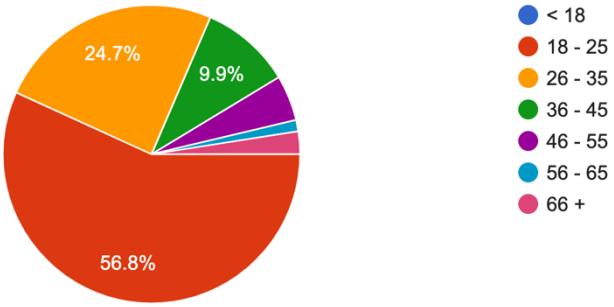
* Indicates required question
* 表示必填問題

Section 1: Personal Information **第一部分：個人信息**
In this section, we will collect some personal information to better understand the background information of our respondents. Your responses will remain confidential and will only be used for research purposes.
在這一部分，我們將收集一些個人信息，以便更好地了解受訪者的背景信息。您的回答將保持保密，僅用於研究。

Q1 What is your age 您的年紀？*
<18
18 - 25
26 - 35
36 - 45
46 - 55
56 - 65
66+

1. What is your age 您的年紀？

81 responses



Q2 What us your employment status 您的就業狀況？*

Student 學生

Full-time 全職

Part-time 兼職

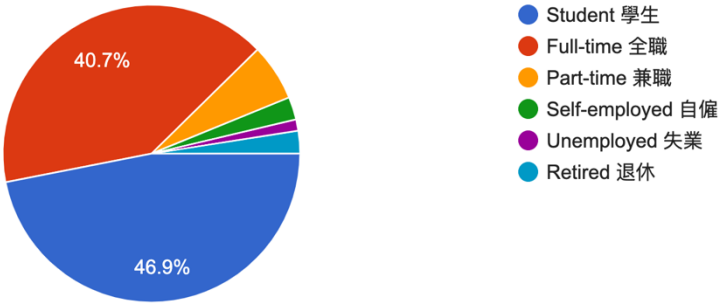
Self-employed 自僱

Unemployed 失業

Retired 退休

2. What us your employment status 您的就業狀況？

81 responses

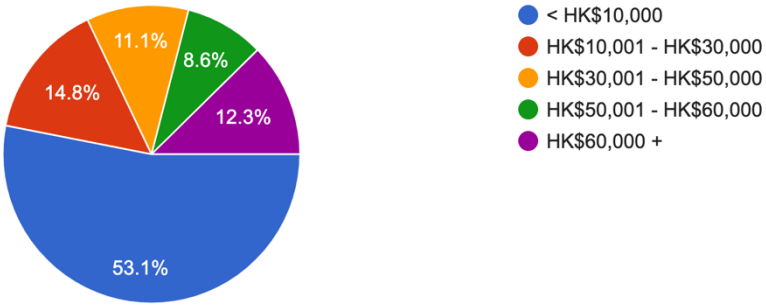


Q3 What is your monthly income 您的月收入是多少？

< HK$10,000
HK$10,001 - HK$30,000
HK$30,001 - HK$50,000
HK$50,001 - HK$60,000
HK$60,000 +

3. What is your monthly income 您的月收入是多少？

81 responses



Q4 What is your highest level of education 您的最高學歷是什麼？*

High school diploma 高中畢業

Bachelor's degree 學士學位

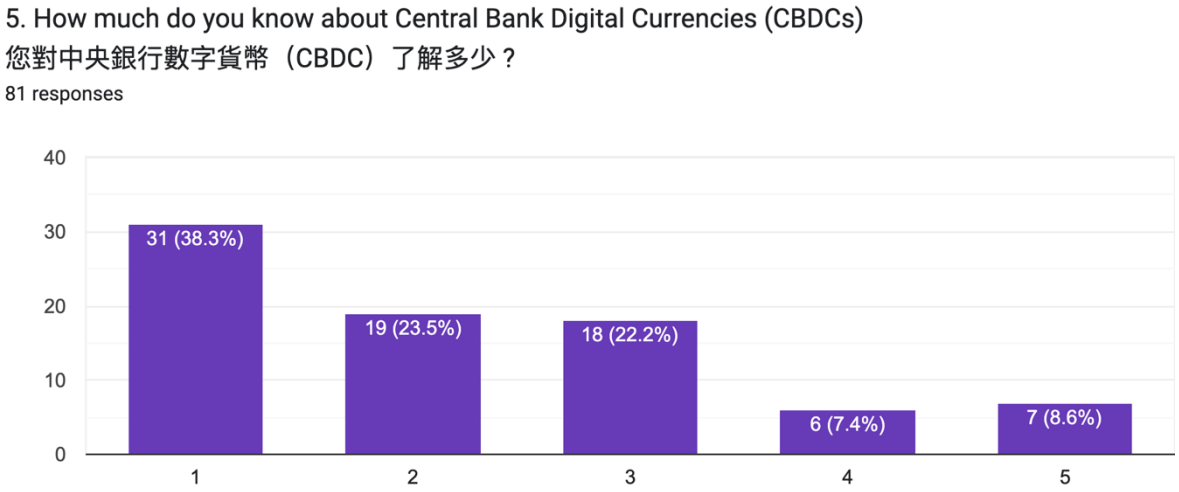
Postgraduate degree or above 研究生學位或以上

4. What is your highest level of education 您的最高學歷是什麼？

81 responses

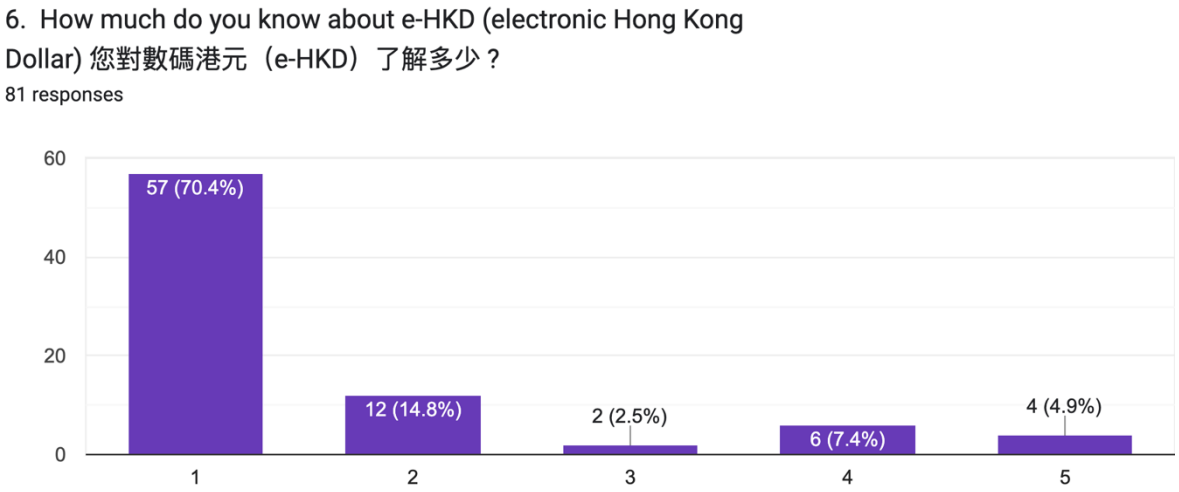
Q5 How much do you know about Central Bank Digital Currencies (CBDCs) 您對 中央銀行數字貨幣（CBDC）了解多少？

Not at all 完全不了解 1 2 3 4 5 Very much 非常了解



Q6 How much do you know about e-HKD (electronic Hong Kong Dollar) 您對數碼 港元（e-HKD）了解多少？

Not at all 完全不了解 1 2 3 4 5 Very much 非常了解



Section 2: Acceptance and Potential Usage of e-HKD 第二部分：e-HKD 的接受 度與潛在使用 Before we head towards the next section, here is a brief introduction to the e-HKD. The proposed retail Central Bank Digital Currency (rCBDC), known as e-HKD, has been initiated by the Hong Kong Monetary Authority (HKMA) as part of its exploration into digital currencies, starting in June 2021. The e-HKD aims to enhance the availability and usability of central bank money, potentially improving transaction efficiency, supporting financial inclusion, and reinforcing monetary policy. As a digital form of the Hong Kong dollar, e-

HKD would allow individuals and businesses to conduct transactions electronically, thus providing a safer and more efficient means of payment. Its introduction could address the challenges posed by declining cash usage and the rise of private digital currencies, ensuring that the central bank maintains its role in the financial ecosystem. In the following section, we would like to gather your feedback on your acceptance of eHKD and your thoughts on its potential usage.

在進入下一部分之前，這裡簡要介紹一下數碼港元（e-HKD）。這項提議的零售中央銀行數 字貨幣（rCBDC），被稱為 e-HKD，由香港金融管理局（HKMA）於 2021 年 6 月開始探索數 字貨幣的一部分。e-HKD 旨在提高中央銀行貨幣的可用性和易用性，潛在地改善交易效率， 支持金融包容性，並加強貨幣政策。 作為港元的數字形式，e-HKD 將允許個人和企業以電子方式進行交易，從而提供更安全和更 高效的支付方式。其引入可以解決現金使用下降和私人數字貨幣興起所帶來的挑戰，確保中 央銀行在金融生態系統中的角色。 在接下來的部分中，我們希望收集您對 e-HKD 的接受度以及對其潛在使用的看法。

Q7 What methods do you currently use for daily transactions (Select all that apply) 您目前使用哪些方法進行日常交易（選擇所有適用的選項）? *

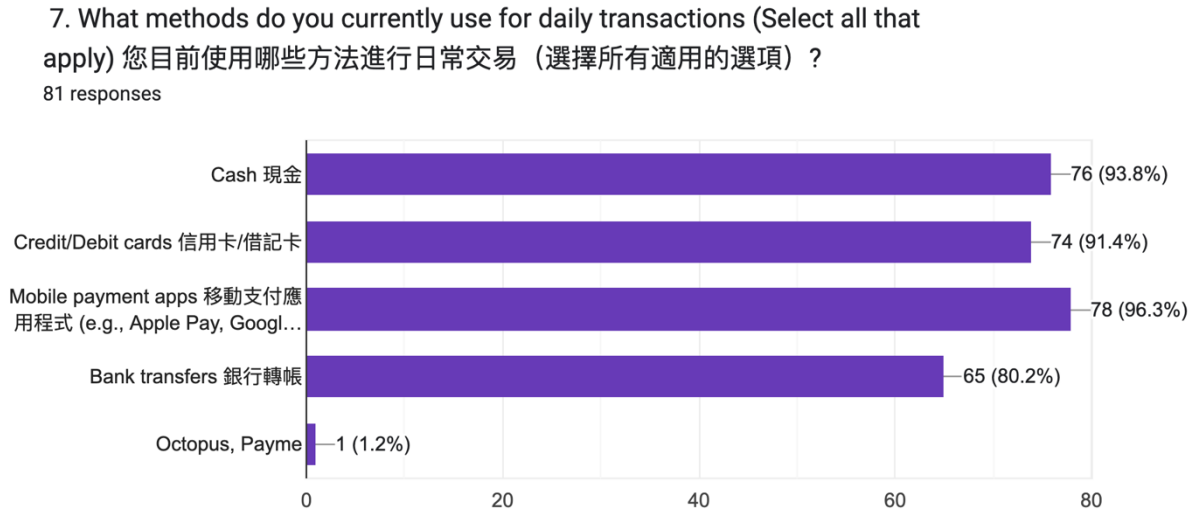
Cash 現金

Credit/Debit cards 信用卡/借記卡

Mobile payment apps 移動支付應用程式 (e.g., Apple Pay, Google Pay)

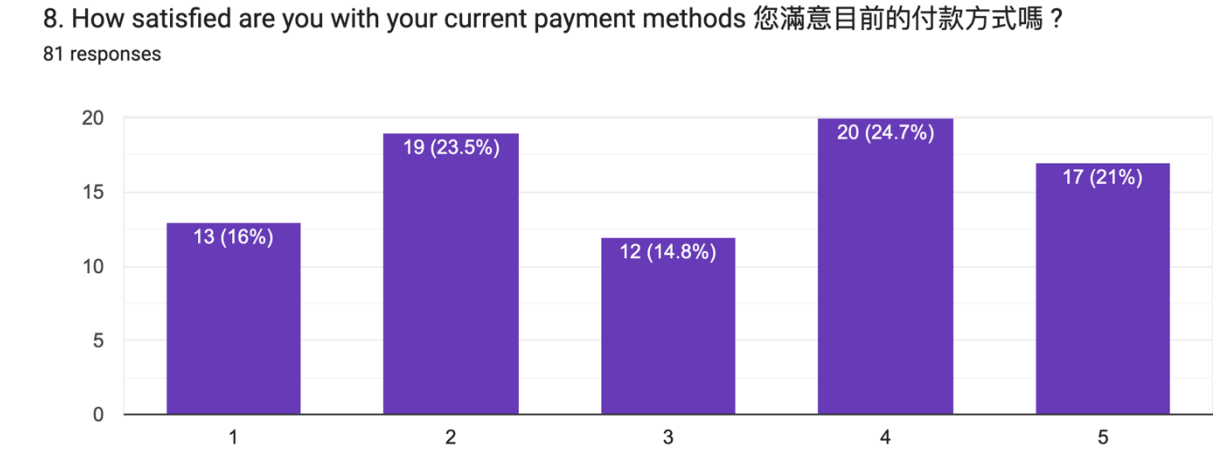
Bank transfers 銀行轉帳

Others 其他



Q8 How satisfied are you with your current payment methods 您滿意目前的付款 方式嗎 ?*

Not satisfied 非常不滿意 1 2 3 4 5 Very satisfied 非常滿意

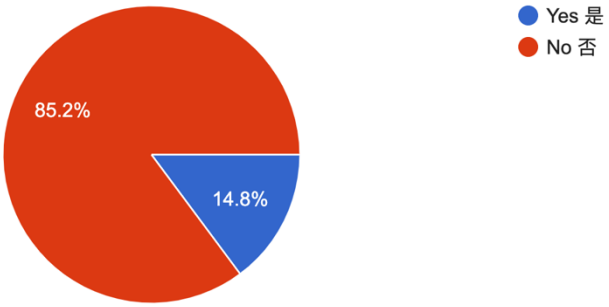


Q9 Have you ever used a digital currency (e.g., Bitcoin, stablecoins) 您是否曾使用 過數碼貨幣（例如，比特幣、穩定幣）？

Yes

No

9. Have you ever used a digital currency (e.g., Bitcoin, stablecoins)
您是否曾使用過數碼貨幣（例如，比特幣、穩定幣）？
81 responses



Q10 If yes, how frequently do you use digital currencies 如果是，您多頻繁使用數 碼貨幣 ?*

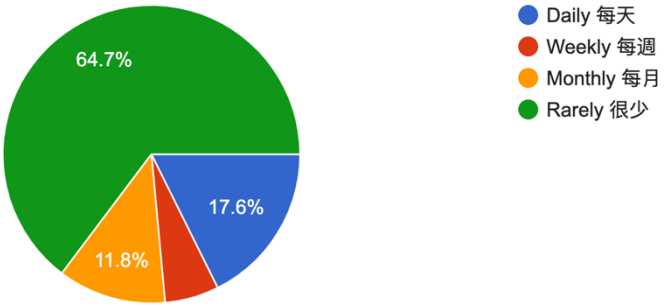
Daily 每天

Weekly 每週

Monthly 每月

Rarely 很少

10. If yes, how frequently do you use digital currencies 如果是，您多頻繁使用數碼貨幣？
17 responses



Q11 How often do you prefer using digital payment methods over cash 您多常更 偏好使用線上支付方式而非現金 ?*

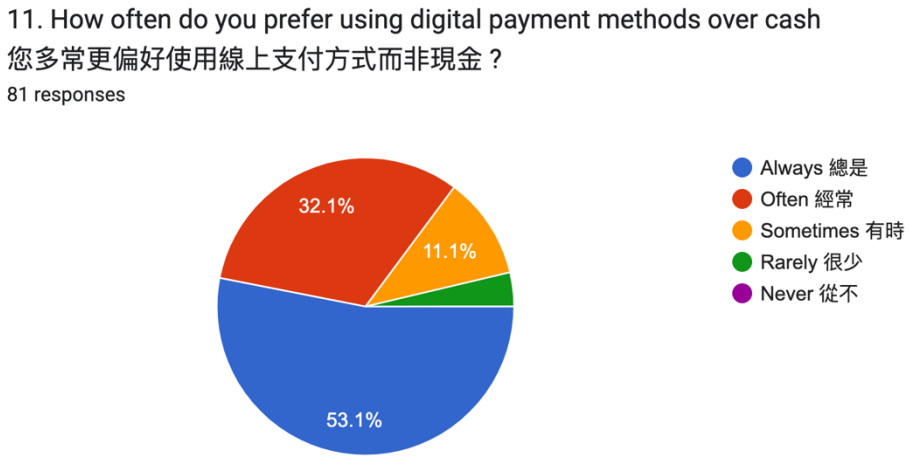
Always 總是

Often 經常

Sometimes 有時

Rarely 很少

Never 從不



Q12 What factors influence your preference for digital payments (Select all that apply) 影響您偏好數碼支付的因素是什麼（選擇所有適用的選項）?*

Convenience 便利性

Security 安全性

Speed of transaction 交易速度

Acceptance by merchants 商家接受度

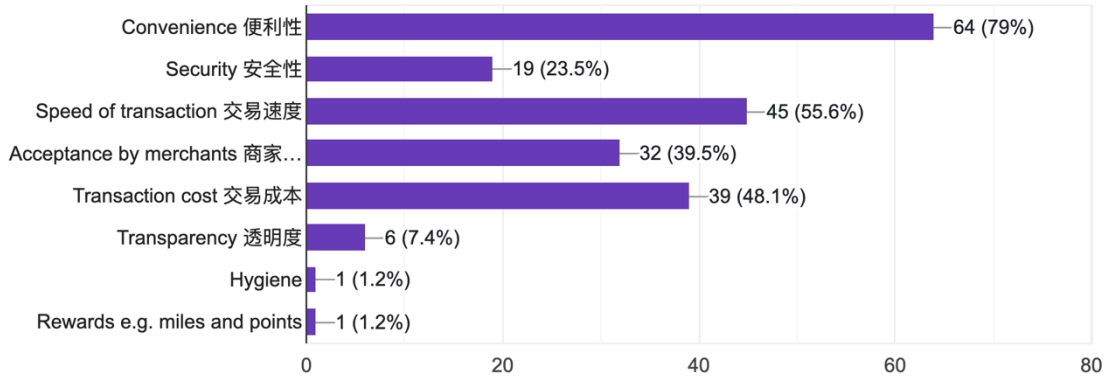
Transaction cost 交易成本

Transparency 透明度

Others 其他

12. What factors influence your preference for digital payments (Select all that apply) 影響您偏好數碼支付的因素是什麼（選擇所有適用的選項）？

81 responses



Q13 What benefits of e-HKD do you find most appealing (Select all that apply) 您認為 e-HKD 的哪些好處最具吸引力（選擇所有適用的選項）?*

Increased convenience 增加便利性

Enhanced security 增強安全性

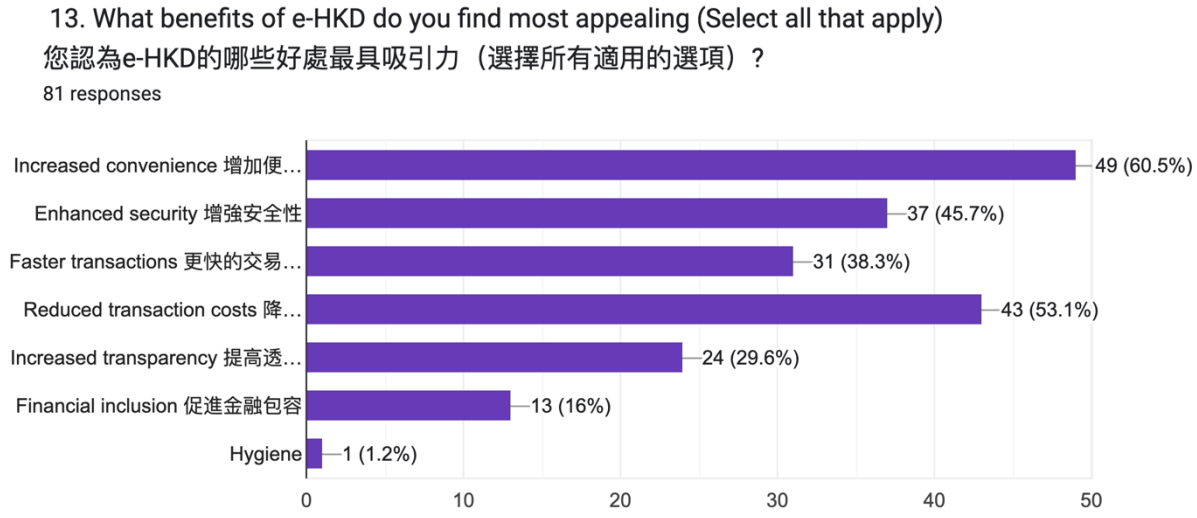
Faster transactions 更快的交易速度

Reduced transaction costs 降低交易成本

Increased transparency 提高透明度

Financial inclusion 促進金融包容

Others 其他



Q14 In which scenarios do you think you would use e-HKD (Select all that apply) 您認為在以下哪些情境中會使用e-HKD（選擇所有適用的選項）?*

Daily transactions (e.g., groceries, bills) 日常交易（例如，購買雜貨、支付賬單）

Online purchases 在線購物

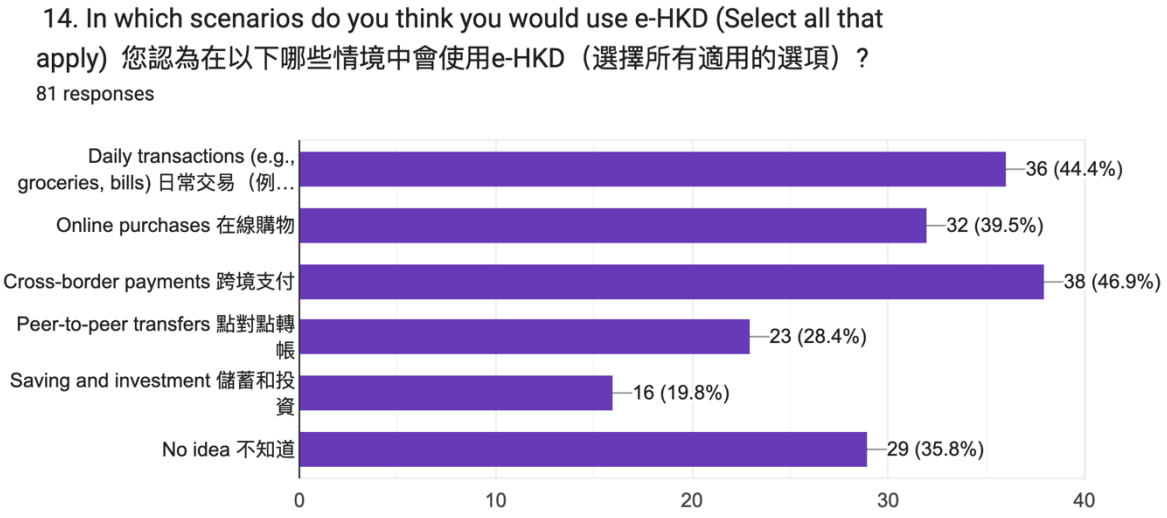
Cross-border payments 跨境支付

Peer-to-peer transfers 點對點轉帳

Saving and investment 儲蓄和投資

No idea 不知道

Others 其他



Q15 What concerns do you have regarding the use of e-HKD (Select all that apply) 您對使用e-HKD 有什麼擔憂（可選擇所有適用的選項）?*

Privacy issues 隱私問題

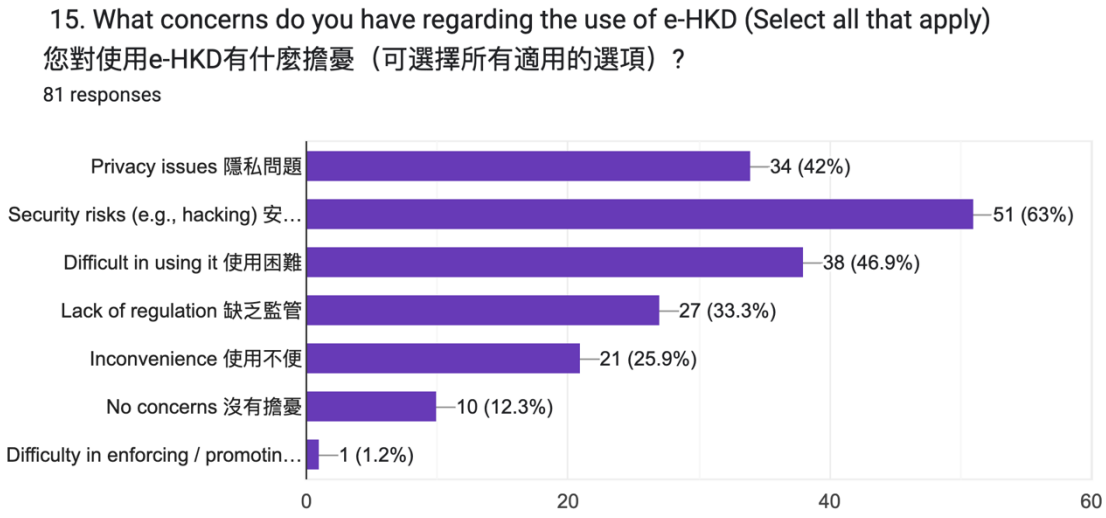
Security risks (e.g., hacking) 安全風險（例如，黑客攻擊）

Difficult in using it 使用困難

Lack of regulation 缺乏監管

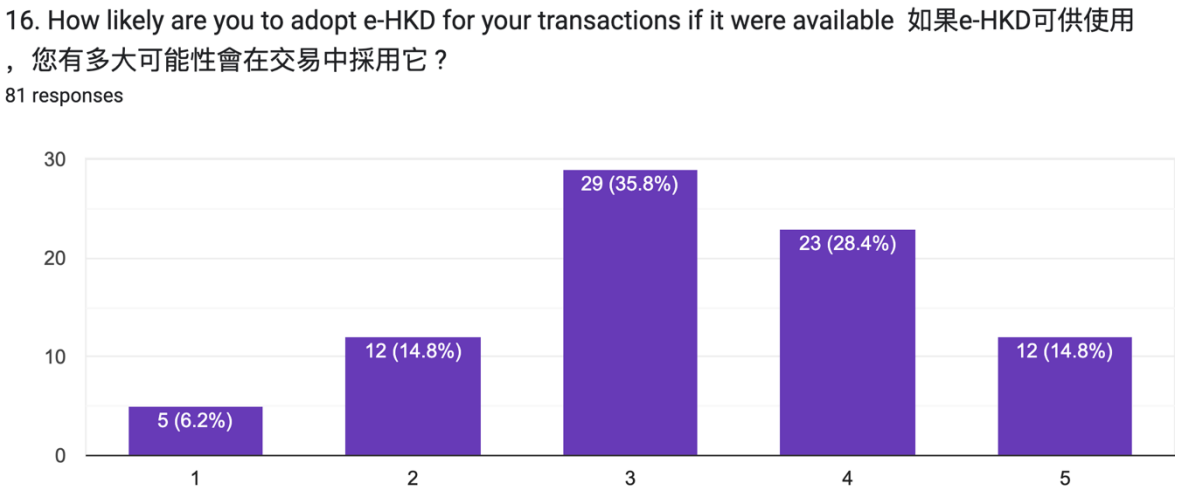
Inconvenience 使用不便

No concerns 沒有擔憂



Q16 How likely are you to adopt e-HKD for your transactions if it were available 如果 e–HKD 可供使用 ，您有多大可能性會在交易中採用它 ?*

Very unlikely 非常不可能 1 2 3 4 5 Very likely 非常可能



Appendix B: Interview Transcript

Appendix B.1 Interview Transcript 1: Jason (SME Owner)

Interviewer: Cheung Hoi Lam (I)
Interviewee: Jason (J)
Date & Time: 2nd February 2025, 14:00
Format: Zoom

I: Thank you for taking part in the interview! Let's begin.
I: Were you aware of e-HKD before this interview?
J: Yes, I have heard of the concept.
I: [Interviewer provides explanation of e-HKD]
I: What are the biggest challenges you face with current payment methods for your business?
J: Cross-border payments are my biggest headache. Transferring money to suppliers takes 3-5 business days with hefty fees - sometimes 3% of the transaction. For small businesses like mine, these delays and costs hurt our cash flow.
I: What's your take on e-HKD?
J: If implemented right, e-HKD could be revolutionary - but only if it solves cross-border payment inefficiencies. The real value would be instant, low-cost international transfers.
I: Would you try e-HKD?
J: Absolutely, but only if it's not limited to Hong Kong. If it's just another local payment option, I'll stick with what I'm using now. It needs to work seamlessly across borders.
I: What worries you about e-HKD?
J: My main concern is interoperability. If it can't connect with other digital currencies or traditional banking systems smoothly, it won't solve my problems. Also, adoption by suppliers would be crucial.
I: If e-HKD provides an alternative for shops that previously only accepted cash, would you like it?
J: Absolutely. I hate using cash - it's messy and hard to track for accounting. Digital payments are always better for business records.
I: Would you accept e-HKD from customers?
J: Only if it converts easily to HKD in my bank. I can't afford liquidity risk.
I: Would you consider using programmable features of e-HKD, like automatic payments upon delivery with suppliers?
J: I'd need to study this in more detail to ensure it meets security and compliance standards. But conceptually, it seems like it could improve payment efficiency.
I: If e-HKD worked seamlessly in Greater Bay Area cities, would you expand your supplier/customer base there?
J: Definitely. That would open up valuable new business channels for us.
I: Thank you for your time today, that’s it for the interview.

Appendix B.2 Interview Transcript 2: Christine (Housewife)

Interviewer: Cheung Hoi Lam (I)
Interviewee: Christine (C)
Date & Time: 3rd February 2025, 12:00
Format: Face-to-face

I: Thank you for participating in this interview.
I: Had you heard about e-HKD before today?
C: No, this is the first time. Is it like Octopus?
I: [Interviewer provides explanation of e-HKD]
I: What are the biggest challenges you face with current payment methods?
C: I don't need more options - I'm perfectly happy with Octopus and cash. My phone already has too many apps. Sometimes I forget which one to use where.
I: What's your take on e-HKD?
C: It sounds complicated. Another app to download and another password to remmeber? I just want simple ways to pay that work everywhere.
I: Would you try e-HKD?
C: Only if it's as easy as Octopus - just tap and go. No extra steps. And it must work at all the places I shop, especially local markets
I: What worries you about e-HKD?
C: I don't want my money scattered across different apps. How would I keep track? And what if my phone breaks or runs out of battery? Cash never has these problems.
I: What would make you try e-HKD?
C: Maybe if I can get more e-HKD when opening the account? Like a welcome bonus.
I: If e-HKD could be used at shops that currently only take cash, would that appeal to you?
C: That would be quite convenient. I'd like it if it works this way - sometimes I forget to bring enough cash to wet markets.
I: If utilities offered discounts for e-HKD payments, would you use it?
C: How big would the discount be? Well, if it's worthwhile, I suppose I'd consider using e-HKD then.
I: Would you use e-HKD to send money to overseas relatives if it was fee-free and instant?
C: Oh, if it's truly cheaper and faster like you say, then yes. Though I'll probably need some time to learn how to use it properly.
I: Thank you for your time today, that’s it for the interview.

Appendix B.3 Interview Transcript 3: Justin (Engineer)

Interviewer: Cheung Hoi Lam (I)
Interviewee: Justin (J)
Date & Time: 2nd February 2025, 16:00
Format: Face-to-face

I: Thank you for your time today.
I: Were you aware of e-HKD before this discussion?
J: No, but I'm familiar with crypto conceptually.
I: [Interviewer provides explanation of e-HKD]
I: What are the biggest challenges you face with current payment methods?
J: I hate carrying multiple cards and bringing cash. I've consolidated everything into Apple Wallet - any new payment method needs to integrate seamlessly on my phone.
I: What's your take on e-HKD?
J: Potentially interesting, but it needs to offer clear advantages over what I'm using now. The government backing is a plus for security, but that alone won't make me switch
I: Would you try e-HKD?
J: I'd give it a shot if there were good launch incentives - like cashback or exclusive offers. But it would need to be at least as convenient as my current setup and bring me the benefits of my credit card rebate.
I: What worries you about e-HKD?
J: Mainly fragmentation. If it requires a separate app or doesn't work with existing payment terminals, that's inconvenient. Also, privacy concerns - how much spending data will the government track?
I: How would you feel if e-HKD could replace cash-only payments?
J: I love that idea. Just my phone is needed for everything. I always prefer digital over cash.
I: Would you be comfortable receiving your salary in e-HKD?
J: Hmm, I'd need to see clear advantages over the current system. Right now it seems less convenient. But if e-HKD becomes universally accepted and maybe enables faster salary access, I'd be open to the idea.
I: Thank you for your time today, that’s it for the interview.