

SELF-EFFICACY TOWARD E-CNY: FROM FOREIGN VISITORS' PERSPECTIVES

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INTRODUCTION

New payment systems (e.g., mobile payments) and crypto currency (e.g., bitcoin) have gained a growing acceptance in the digital economy. Along the trend, many countries are developing a central bank digital currency (CBDC). Among the front runners is China; a pilot version of digital yuan (e-CNY) was launched in 2019. Further, e-CNY was showcased in the Beijing Winter Olympics in 2022 for foreign visitors as well. Although allowing CBDC to be used by foreign visitors is considered as an opportunity to expand retail CBDC usage (Auer et al., 2021), there has been little research from the foreign visitors' perspective. Previous studies suggested that consumers' adoption of new digital payment instruments is affected by individuals' self-efficacy (Makki et al., 2016), which is influenced by individuals' preparedness toward the digital currency. Therefore, using the case of e-CNY, this current study examines the relationship between preparedness and self-efficacy toward foreign CBDC.

Preparedness has been conceptualized as activities aimed at improving responses and coping capabilities (Sutton & Tierney, 2006) regarding risk, planning, resource allocation, deployment in actual events, feedback, and learning (Baker & Ludwig, 2016; Tierney et al., 2002) as in emergency preparedness or disaster preparedness (Hystad & Keller, 2006; Orchiston, 2013; Tini et al., 2018). In the tourism literature, although the term "tourism preparedness" focused more on the provider's side, research has also noted the travelers' side because travelers, especially international travelers, need to prepare for the different situations that may arise

during the trip, for example, learning about the travel designation's regulations and culture, gaining knowledge of travel security, and handling the crisis in the foreign environment. Tsaur et al. (2010) emphasizes that gaining knowledge of travel security and preparing how to deal with crises is essential to ensure a smooth and safe trip.

Specifically, recognizing the complex nature of consumers' preparedness perception, this research employed fsQCA (fuzzy-set Qualitative Comparative Analysis) and identify the combination of preparedness items that affect the individuals' self-efficacy. Further, the young generation, who are labeled digital-native, are likely to be more inclined to try foreign CBDC. Thus, this study focuses on the earlier generations (ages 40 and above). The results are interpreted by Plog's model.

METHOD

To test the relationship between the preparedness and self-efficacy toward foreign CBDC, this research conducted the online survey on June 2022 about the use of e-CNY when Koreans travel to China. Given active visitor flows between Korea and China, the Korean respondents are well fit for this research. The survey provided visual and text information about the e-CNY mobile wallet before asking specific questions. Adapting tourism preparedness (Tsaur et al., 2010) and technology readiness (Ayeh, 2015) to this current research context, we developed three dimensions of preparedness (preparing capability, emergency response, on-site using capacity) with thirteen factors that are associated with self-efficacy toward foreign CBDC, specifically e-CNY. To verify the

relationship, this research adopted fsQCA. Based on the complex theory and the set theory, fsQCA investigate which configurations of conditions could lead to the outcome (Ragin, 2014). The research framework is shown in Figure 1.

The survey sample was Koreans with ages 40

and above (40s 44.5%, 50s 36.2%, 60s and above 19.3%), who have experienced visiting China at least once. We gathered 243 data sets. More than a half of the sample (51.9%) was male, 77% use credit card for off-line payment, and 61.7% had visited China for the vacations.

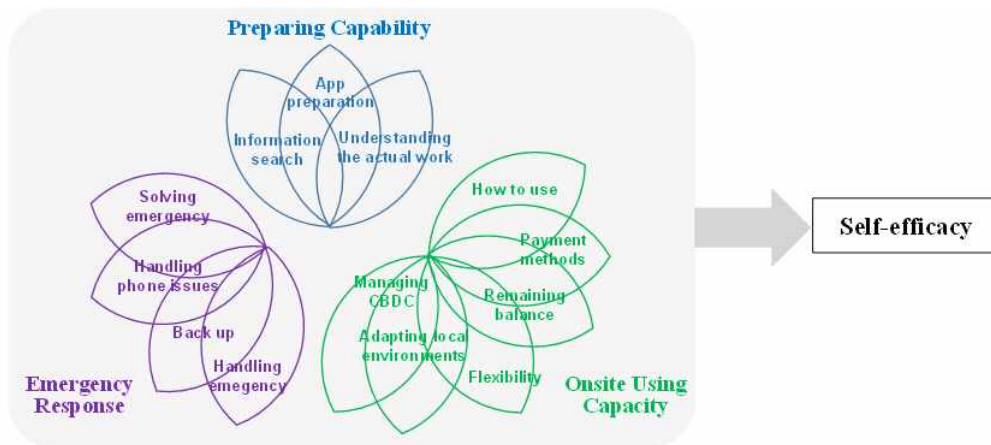


Figure 1. Research framework

FINDINGS

The results of fsQCA (Figure 2) identified seven patterns (R1 to R7) that are related to the self-efficacy toward foreign CBDC. Across these, three factors stand out, i.e., app (e-CNY mobile wallet) preparation, payment methods, and managing CBDC. Specifically, managing CBDC is a core element in three configurations; and app

preparation is a core element in two configurations. These results suggest the following proposition.

Proposition 1: App preparation and managing CBDC are the keys to being confidently ready for CBDC from the tourists' perspective.

Then, this study labeled each of the configurations following the Plog's model and provide practical implications.

Travel Preparedness	Configuration Elements	Configurations for Over middle ages tourists typologies						
		R1. Allocentric	R2. Near-Psychocentric	R3. Near-Allocentric	R4. Centric-Dependable	R5. Psychocentric	R6. Centric-Venturer	R7. Psychocentric
Preparation Capability	Information search	⊗	●	●	●	●	●	●
	App preparation	●	●	●	●	●	●	●
	Understanding the actual work	⊗	●	●	●	●	●	●
Onsite using Capacity	How to use	●	●	⊗	●	●	●	●
	Payment methods	●	●	●	●	●	●	●
	Remaining balance	●	⊗	●	●	●	●	●
	Flexibility	●	⊗	●	●	⊗	●	●
	Adapting local environment	●	⊗	●	●	●	●	●
	Managing CBDC	●	●	●	●	●	●	●
Emergency Response	Handling emergency	⊗	●	●	●	●	●	⊗
	Back up	●	●	●	●	●	●	●
	Handling with phone issues	●	●	⊗	●	●	⊗	●
	Solving emergency	●	●	⊗	⊗	●	●	●
Consistency		0.975	0.978	0.972	0.981	0.974	0.976	0.974
Raw Coverage		0.155	0.114	0.131	0.114	0.144	0.150	0.241
Unique Coverage		0.102	0.003	0.013	0.003	0.004	0.012	0.057
Overall Solution Consistency		0.358						
Overall Solution Coverage		0.881						

Note: ● = Core causal condition present / ● = Peripheral causal condition present / ⊗ = Core causal condition absent / ⊗ = Peripheral causal condition absent

Figure 2. Travel preparedness configurations leading to self-efficacy

1. R5 and R7, psychocentric travelers These patterns reveal the tendency to be controlled, planned, and avoid the unfamiliar, not being flexible in the field, and avoiding emergencies. Plog (1974) described psychocentric travelers as self-inhibited and non-adventuresome, as well as preferring familiar destinations (Plog, 1974; Litvin, 2006). For these types, CBDC can be marketed as easy to control and manage even though there may be fewer on-site flexibility or the users have limited emergency handling capacities.

2. R1, allocentric traveler R1 was labeled allocentric traveler. Plog described, self-confident allocentrics, who “want to see and do new things” to explore the world (Litvin, 2006, p. 245). The results show that R2 focus more on on-site use than preparation. Also, this group showed strong confidence of solving emergency problem. Thus, for this group, highlighting on-site experience and usefulness of CBDC can be effective to enhance the self-efficacy toward CBDC.

3. R2, near-psychocentric traveler Plog (2001) described that the near psychocentrics are most likely to try a destination after it has been well traveled. For this group app preparation in preparation phase is essential as well as emergency responses. Thus, to facilitate CBDC usage, it will be effective to emphasize how travelers can prepare before travel and what they should do in the emergency situation.

4. R3, near-allocentric traveler Flexibility and adaptation appear to be important factor for this group. Adapting Plog (2001), this group was labeled near-allocentric, who tend to be the first major wave of adopters following the allocentrics (Plog, 2001). For this group, information on how CBDCs can be used in flexible way and how they can adapt local environment can help to boost the self-efficacy toward foreign CBDC.

5. R4, R7, centric dependable, and centric venturer These groups, which have high volumes of travelers compared to the four types, could be the key to understanding how travelers over 40s perceive foreign CBDC adoption for international travel. For these groups, flexibility, and managing CBDC on site will be useful to enhance the confidence about foreign CBDC use in the condition of lacking capability of solving emergency situations.

From these findings, we propose the following proposition

Proposition 2: Applying Plog’s model, different marketing focus can be applied by different target groups of travelers to enhance the self-efficacy toward foreign CBDC.

CONCLUSION

This research explores the combinations of conditions that can lead to international travelers confidence toward foreign CBDC. This study has two academic implications; 1) developed traveler preparedness, which is an important theme to understand tourists through examining how tourists can be ready as well as what components are appropriate toward novel financial technologies; 2) combining Plog’s model to understand the characteristics of among the consumers with ages over 40s, who are less willing to use new technologies; and, 3) employing the fsQCA methodology to reveal different and diverse patterns that have unique characteristics with over 40s, who are often misunderstand as a homogenous group.

Considering the new technology of CBDC in unfamiliar situations, Plog’s model helps understanding the diversity of traveler preparedness. The findings of this study will be useful for central banks to design and promote CBDCs for foreign visitors more effectively. Aligning travelers’ characteristics, destination characteristics with the findings of this study based on Plog’s model may help destination marketing organizations to attract visitors with a right fit and further promote CBDC as a new way of payment.

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