Chapter 14
Investigating the Impact of Demographic Factors on Personal Innovativeness in Digital Wallet Usage: An Exploratory Study

Muhammad Azmi Sait
https://orcid.org/0000-0002-5175-6436
Universiti Brunei Darussalam, Brunei

Mohammad Nabil Almunawar
https://orcid.org/0000-0001-5296-2576
Universiti Brunei Darussalam, Brunei

Muhammad Anshari
https://orcid.org/0000-0002-8160-6682
Universiti Brunei Darussalam, Brunei

Masairol Masri
Universiti Brunei Darussalam, Brunei

ABSTRACT

This study examines demographic factors and personal innovativeness to information technologies (PIIT) among Brunei Darussalam's digital wallet users. Analyzing data from 181 respondents, it explores the influence of gender, age, and adopter category on PIIT levels. Results show no significant correlation between gender and PIIT levels, challenging gender-based assumptions. Age groups also exhibit no significant association with PIIT levels, contrary to expectations. However, the adopter category demonstrates a significant relationship with PIIT levels, highlighting the impact of adoption behavior. Tailored marketing, product design, and policy interventions are needed for digital inclusion. Findings of this study have implications for academia, industry, and policymaking, providing insights into technology adoption behaviors in the digital wallet domain.

DOI: 10.4018/979-8-3693-2865-1.ch014

INTRODUCTION

Digital wallets, as a type of financial technology (fintech) payment tool, are increasingly gaining significance on a global scale. This trend is driven by a shift in preferences towards more convenient and rapid payment transactions (Gomber et al., 2017; Nabila et al., 2018). The escalating demand for cashless payment methods worldwide (Singh and Sinha, 2020), coupled with the widespread use of smartphones facilitating e-commerce activities in recent years (Alam et al., 2021), has further underscored the growing relevance of digital wallets in today's world.

In the Asia Pacific region, China stands out as the dominant force in the digital wallet market. It boasts the highest number of digital wallet users, with reports indicating a staggering 1.18 billion users, representing over 45 per cent of the country's population. This sizable user base accounts for 42.1 per cent of global digital wallet users (Boku, 2021). The surge in digital wallet adoption in China is attributed to the favorable technological landscape in the country, along with the population's readiness to embrace and integrate this technology into their daily payment transactions (Capgemini Research Institute, 2021; Charlotte, 2022).

In the case of Brunei Darussalam, a country with exceptionally high internet penetration of over 95 per cent of the total population (The World Bank Group, 2022a), as well as a significant number of mobile cellular subscriptions totaling up to 536,589 subscribers in 2020 (The World Bank Group, 2022b), the adoption of digital wallets remains relatively low (AITI, 2019). This disparity can be attributed to the recent introduction of digital wallet technologies in Brunei Darussalam, with the BruPay digital wallet being launched only in late 2018 (Sait et al., 2023). It is noteworthy that digital wallet usage in Brunei is still in its infancy compared to neighboring countries, where digital wallet markets have already reached a more mature stage of development (Boku, 2021).

Beyond the COVID-19 pandemic, the digital wallet industry in Brunei Darussalam has experienced significant growth, largely driven by the social restrictions imposed by the government to mitigate the spread of the virus. There has been a notable surge in cashless transactions, increasing by up to 116 per cent compared to previous years, alongside a reported decline in ATM cash withdrawals (Rasidah, 2020). These trends indicate a shift towards a digital economy in Brunei Darussalam, aligning with the government's initiative outlined in the Digital Economy Masterplan 2025 (Prime Minister's Office, 2021).

According to Rogers (1995), the innovation decision-making process involves two main categories of individuals: adopters and resistors. Additionally, Rogers (1995) suggests that adopters can be further classified as either early adopters or late adopters, with their levels of personal innovativeness differing from each other. Early adopters typically exhibit higher levels of personal innovativeness, while late adopters may display lower levels. This raises an intriguing question about whether adopters' demographic characteristics play a role in determining their level of personal innovativeness.

Therefore, given the widespread availability of digital wallet services in Brunei Darussalam accessible to all residents, the objective of this study is to investigate variations in personal innovativeness to information technology (PIIT) among respondents based on their demographic characteristics, including gender, age, and adopter categories. Considering the recent introduction of digital wallet technology in Brunei in 2018 (Sait et al., 2023), it is logical to target digital wallet users as respondents, as they are likely to exhibit a certain level of personal innovativeness towards information technologies.

The subsequent sections of this paper are structured as follows: The following section conducts a review of relevant literature, examining prior studies that have investigated the determinants of personal innovativeness. This is followed by the methodology section, which outlines the sampling procedure