

## Chapter 4

# Bank Customer Green Banking Technology Adoption: A Sequential Exploratory Mixed Methods Study

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### ABSTRACT

*Sustainability has become the global need for survival in all scopes due to financial development's side effects that have resulted in environmental destruction. The world leaders have proposed green banking (GB) to reduce carbon footprints from banking operations by promoting paperless financial services based on technology. However, the adoption of GB remains unsatisfactory in the UAE. The study attempts to investigate the determinants of consumers' adoption of GB technology. An exploratory sequential mixed-method approach is employed. The qualitative analysis identified six new challenges facing customers' intention adoption of GB technology: customer awareness, personal innovativeness, bank reputation, security and privacy, system quality, and government support. The preliminary qualitative findings are mostly confirmed by quantitative study whereby customer awareness, personal innovativeness, system quality, and bank reputation significantly impact customers' intention to adopt GB technology. The discussions and implications of these findings are further elaborated.*

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## **INTRODUCTION**

The issues of environmental protection have become very critical for emerging countries, as they are exposed to the pressing challenges of climate change, pollution, deforestation, loss of biodiversity and arable land (Doh et al., 2019). The dependency on natural resources for economic development underpins the necessity for implementing sustainable strategies (Stockholm Environment Institute, 2013). This has resulted in supervisory authorities like United Nations Environment Programme (UNEP) and International Finance Corporation (IFC) initiating a sustainable transformation of the financial system to mitigate the severe problems of environmental emissions (Zhang et al., 2019; United Nations Framework Convention on Climate Change [UNFCCC], 2021). To tackle climate change and its negative impacts, world leaders at the UN Climate Change Conference in Paris reached a breakthrough in December 2015: the historic Paris Agreement that was adopted by 196 countries, which includes commitments to reduce their emissions over time (UNFCCC, 2021). The digitalisation of businesses through various Industry Revolution (IR) 4.0 technologies like the Internet of Things (IoT) and Artificial Intelligence (AI) has been suggested as means to alleviate pressure on the environment and natural resources (UNFCCC, 2021; Bukhari et al., 2022). However, many emerging economies are trailing behind in environmental unsustainability and lack of digitalisation (Bukhari et al., 2022).

Acknowledgement of digitalisation and environmentalism as a worldwide concern exerted pressure on the financial institutions to adopt green agenda, particularly in the banking industry (Julia & Kassim, 2020). The banking sector is considered the driving force behind economic sustainability (Bukhari et al., 2022). It plays a fundamental role in economic growth and key financier to consumers (Ozili & Opene, 2021). Banks may contribute to environmental conservation by incorporating green concepts into their lending and investment practices, diverting customers' attention to environmental management and the deployment of relevant green technology (Masukujjaman & Aktar, 2014). Thus, the country's sustainability is mainly dependent on the greening and digitalising of the banking industry. This led to the development of the concept of Green Banking (GB), a banking ideology that is based on the principles of environmental sustainability by integrating structural technology upgrades to banking operations and promoting paperless based financial services (Bouteraa et al., 2021). In other words, through technological and operational improvements and changing client habits, green banking has gradually made inroads in promoting environment-friendly practices, with a clear vision of future sustainability. This concept is mutually beneficial for banks, customers, and economies not only guarantees greening but also facilitates improvements in banks' assets quality (Naveenan et al., 2021) as well as their financial performance (Finger et al., 2018). However, this innovative ideology is still struggling to be adopted by many developing countries (Bukhari et al., 2022).

The United Arab Emirates (UAE) is considered among the world's highest energy consumers, and with the continuous increase in population has escalated demands for energy production for constant economic growth (Juaidi et al., 2016). As natural reserves are limited, sustainable resources are necessary to be explored. Thus, environment and sustainability have received significant attention from the UAE's government (Dubai Carbon, 2018; UAE-Ministry of Climate Change and Environment [MOCCA], 2017). The UAE-MOCCA has highlighted that the idea of GB is essential to the economy by affirming that an investment of only 1-2% of GDP in the green agenda will bring the country a 4-5% increase in GDP by 2030 (Arcadis, 2018). According to Stiftung (2019), "with rapid economic growth remaining predominant, it cannot be said that the UAE is currently on a sustainable path". The UAE has recorded a high pollution level and violent CO<sub>2</sub> emission increase caused by human and business activities at the

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