

Chapter 12

Investigating Acceptance to Conversational Artificial Intelligence: A Case Study in Vietnam

Hanh Pho

FPT University, Vietnam

ABSTRACT

Artificial intelligence (AI) is predicted to revolutionize most industries in the next few years. This has resulted in a surge in research interest in AI. However, there is a lack of research in the adoption of conversational AI and factors influencing its acceptance. This chapter presents qualitative research exploring perceptions and acceptance of Vietnamese people to conversational AI. Participants of various careers, such as doctors, educators, and content creators, participated in in-depth interviews to share their experiences. Findings show that people are generally more receptive towards using conversational AI in their personal lives, but very skeptical towards the application of it in their work, due to price value, the uncertainty of its performance, and anthropomorphism. People in creative industries appear to be more inclined to use conversational AI if it has a higher level of anthropomorphism. Based on these findings, suggestions for conversational AI businesses and entrepreneurs are proposed.

DOI: 10.4018/979-8-3693-2827-9.ch012

Copyright © 2024, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

INTRODUCTION

Artificial intelligence (AI) is a “collection of tools and technology” that learns and develops on human cognitive functions with the purpose of managing and analyzing data with great accuracy, and enhancing organizational management (Alsheibani et al., 2018; Lai et al., 2020). AI is predicted to infiltrate many industries, with an estimated contribution to the global economy of approximately 15.7 trillion USD by 2030 (Murphy et al., 2021). In 2023, a series of large Vietnamese technology enterprises, such as Viettel and FPT, have begun to invest heavily in research, development, and application of AI. Particularly, Viettel Group, the state-owned multinational telecommunication corporate with the headquarter in Hanoi, Vietnam, is focusing on researching and developing AI in three main areas: voice and natural language processing, computer vision, and data analysis (VNPT, n.d.). Meanwhile, FPT Corporation, one of the top 20 leading private corporates in Vietnam, is applying AI technology in many fields, from health care to education and handling administrative procedures (Thanh Anh, 2023).

Conversational AI is one type of AI agents with the ability to “stimulate and automate” conversations and verbal interactions (Kulkarni et al., 2019). Some of the most popular conversational AI agents are chatbots and voice assistants. According to BlueWeave Consulting (2023), Vietnam conversational AI market size was estimated to be worth USD 152.72 million in 2022. From 2023 to 2029, the Vietnam conversational AI market size is projected to grow at a CAGR of 21.81%, reaching a value of USD 604.48 million by 2029 (BlueWeave Consulting, 2023). Conversational AI market in Vietnam is dominated by foreign enterprises such as Google LLC, Microsoft, and SAP SE. In addition, Vietnamese technology corporates, such as FPT AI, Vbee, and VNPT Smart Voice, also provide similar services, contributing to the competitive landscape of the language AI market in Vietnam. In particular, FPT AI has introduced new features to its conversational AI, such as convert text-to-speech and vice versa, and recreating voices of individuals as demanded.

In the education sector in Vietnam, over the past decade, AI chatbots have been researched, developed, and applied in some universities. FIT-Ebot chatbot has been developed to support management and learning at the University of Natural Sciences, Ho Chi Minh National University (Ho et al, 2018). Telecommunications Institute of Technology has introduced an intelligent virtual assistant supporting students, capable of answering new student queries regarding university and campus life (Do et al., 2018). Recently, the NEU chatbot has been deployed to assist in the university admissions process of the National Economics University (Nguyen et al., 2021). In terms of communication and media sector, in live broadcasts, conversational AI can provide real-time translation services, enabling media outlets to reach a global audience. (Tinh Pham, 2022).

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/investigating-acceptance-to-conversational-artificial-intelligence/355210

Related Content

Sustainable Development Goals (SDGs), Halal Supply Chain Management, and the Role of ESG in Promoting Ethical and Eco-Friendly Practices

Muhammad Ghali, Chia-Hua Chang and Lee-Anne Cassandra Johennesse (2024). *Digital Technologies for a Resource Efficient Economy* (pp. 228-255).

www.irma-international.org/chapter/sustainable-development-goals-sdgs-halal-supply-chain-management-and-the-role-of-esg-in-promoting-ethical-and-eco-friendly-practices/346630

How Emerging Technologies Spawn New Social Engineering Paradigms

Horace C. Mingo (2023). *Transformational Interventions for Business, Technology, and Healthcare* (pp. 31-44).

www.irma-international.org/chapter/how-emerging-technologies-spawn-new-social-engineering-paradigms/332736

Integrating Circular Economy Principles for Sustainable Development

Mirna Ibrahim (2024). *Digital Technologies for a Resource Efficient Economy* (pp. 142-165).

www.irma-international.org/chapter/integrating-circular-economy-principles-for-sustainable-development/346625

Smart Metering Landscape in India's Smart Grid Ecosystem

Anusha Thakur (2024). *Digital Technologies for a Resource Efficient Economy* (pp. 180-190).

www.irma-international.org/chapter/smart-metering-landscape-in-indias-smart-grid-ecosystem/346627

The Nexus of Social Commerce and Blockchain Technology: A Comprehensive Review of Theoretical Frameworks and Practical Applications in the Stock Market

Abhay Grover and Nilesh Arora (2024). *Revolutionizing the Global Stock Market: Harnessing Blockchain for Enhanced Adaptability* (pp. 119-130).

www.irma-international.org/chapter/the-nexus-of-social-commerce-and-blockchain-technology/344544