Is UTAUT2 Overdue for Reassessment?
The Evolving Role of Digital Leadership in Adopting Generative AI

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ABSTRACT

The accessibility and cost-efficiency of Artificial Intelligence (AI) tools, particularly Generative AI (GenAI), have led to a significant increase in organizational AI adoption. However, only a small percentage of these organizational adoptions are preplanned and strategically integrated into long-term objectives. As a result, this self-directed adoption of GenAI by knowledge workers is prompting a re-evaluation of digital leadership strategies and technology acceptance models. The UTAUT and its extension, UTAUT2, have been regarded as resourceful frameworks for understanding technology use and acceptance. Nevertheless, the rise of GenAI necessitates extending UTAUT2 to remain relevant in today's digital governance landscape. This article reports on empirical findings that qualitatively explored the question: To what extent do the legacy frameworks of UTAUT and UTAUT2 offer scalable measures for assessing organizational GenAI adoption among leaders and knowledge workers in Australia?

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1. INTRODUCTION

The Unified Theory of Acceptance and Use of Technology (UTAUT) and UTAUT2 are commonly used to assess behavioural objectives during technology adoption. Initially, UTAUT was modelled to evaluate the impacts of four constructs: 1) Performance Expectancy (PE), 2) Effort Expectancy (EE), 3) Social Influence (SI), and 4) Facilitating Conditions (FC) (Venkatesh et al., 2003). Its extension, UTAUT2 (Venkatesh et al., 2012), additionally measured Hedonic Motivation (HM), Price Value (PV), and Habits (H).

While some scholars Marikyan and Papagiannidis (2023) have reviewed the mechanism behind UTAUT and UTAUT2, others Tamilmani et al. (2017) have reviewed how these models were applied in studies from 2003 to 2024. These authors found that GenAI has shifted these dynamics, introducing new elements that make these models dated, suggesting that new research is required to explain the nuances in the adoption process of GenAI.

Given the scalable nature of GenAI platforms, expanding the digital leadership framework to embrace AI leadership concepts could address this growing demand. The proposed framework can provide the tools and strategies to address complex issues such as infrastructure development and social challenges previously recognized as a gap in digital leadership's theoretical and practical contributions (Hensellek, 2020). By integrating AI leadership, organizations can stay ahead of this speedy curve by continuously adapting to ensure sustainable growth.

The discussion on digital leadership highlights digital leaders' significant responsibilities towards their companies, employees, and stakeholders (Hensellek, 2020, p. 65). With GenAI platforms surpassing TAM metrics (Perceived Usefulness PU and Perceived Ease of Use PEOU (Mogaji et al., 2024), digitalization continues to reshape organizational work (Daugherty & Wilson, 2018). Little is understood about digital leadership, as Eberl and Drews (2021, p. 227) stated, "The leadership style of a digital leader is rarely discussed in the literature (n = 5)." Unfortunately, before digital leadership literature matures, the urgency for AI leadership and adopting a holistic approach is empirically calling to help organizations survive the disruptive force of GenAI and the technologies that follow.

A comprehensive AI leadership framework is required to navigate the challenges and opportunities that GenAI represents. Therefore, the AI Leadership Framework (AILF) is introduced, where the GenAI adoption stage is assessed with metrics such as risk, adopters' sense of autonomy, the task, the decision-making process, and how much direction is provided by the leader throughout the process. To pursue this, the following research question was posed:

RQ: To what extent do the legacy frameworks of UTAUT and UTAUT2 offer scalable measures for assessing organizational AI adoption among leaders and knowledge workers in Australia?

In the following sections, we will learn more about the shortcomings of UTAUT and UTAUT2 in the most recent studies that applied these models with Gen AI. Next, the empirical findings from interviews with thirty-two leaders and knowledge workers (KWs) exploring their adoption of GenAI will be discussed. The synthesis of these evidence-based findings provides insights into how leadership and AI strategies must align to harness the full potential of GenAI technologies. The