Applications of Artificial Intelligence for Strategic Management of Organisation

Somsit Duangekanong¹

¹Corresponding Author, Program Director and Faculty Member, Doctor of Philosophy in Technology Education and Management, Graduate School of Business and Advanced Technology Management, Assumption University, Thailand Email: somsitdng@au.edu

Received: 18 February 2022 Revised: 11April 2022 Accepted: 12 April 2022

Abstract

Artificial intelligence (AI) is a new tool for organisational and strategic development which has not much been investigated. Therefore, this research investigates perceptions of strategic management experts about the future of Artificial Intelligence and its usage in strategic management. To achieve the research objective, a survey of strategic management specialists, including organisational strategy managers, consultants and academics (n = 231) was conducted. The research used the modified unified theory of acceptance and use of technology (UTAUT) model to investigate the factors that could contribute to an adoption of AI in the strategic management process of organisation. Within this model, situational factors include technological capability and organisational culture. The study showed all relationships of variables within the model were significant. The strongest effect on adoption intention was from technological readiness, while the effect of performance expectancy and effort expectancy was fully mediated. Furthermore, organisational culture had a significant effect on the adoption intention. The implication of these findings is that there is a need to consider utility and ethics of AI implementation for strategic management. There were several limitations of the study, including geographic focus and inclusion of specific adoption factors. In addition, more research is needed to examine AI adoption for strategic management.

Keywords: organisational culture; technological readiness; UTAUT, artificial intelligence, strategic management

Introduction

Artificial intelligence (AI) has its roots in computation and intelligence and has been in research since 1950s and later, but for a long time, it remained a somewhat obscure area in the academia (Haenlein & Kaplan, 2019). In the past decades, this has gradually changed, with increasing interest in AI for practical applications and further development of artificial neural