







# Exploring Customer Engagement Intentions with Interactive Smart Tables of AI for Full-Service Restaurants Sustainability

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**Abstract.** The study seeks to explore the most important elements which may impact customers' intention or desire to engage with smart tables in full-service restaurants utilizing the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) model. As applications of technology and artificial intelligence continue to develop, comprehending in what way customers perceive and engage with smart systems is crucial for restaurants looking to achieve the best possible customer experience, as well as achieve sustainability. The research adopts a quantitative approach utilizing a questionnaire to gather and examine data from 306 participants. The research focus is identifying elements like as hedonic motivation, societal impact, facilitating conditions, and performance expectation on interacting intention smart tables, in addition to, moderator role for personal innovativeness with the five dimensions. The findings supported all hypotheses except for effort expectancy which did not receive backing. The outcomes of this research add insights to the field of technology adoption and consumer behavior within the restaurant industry offering guidance, for restaurant managers and policymakers in effectively implementing interactive technologies to enrich customer engagement and satisfaction.

**Keywords:** Artificial intelligence · UTAUT2 · Smart tables · Restaurants · Restaurant sustainability · Personal innovativeness

## 1 Introduction

In recent times, there trend has been a growing fascination in emerging technologies like artificial intelligence (AI) among customers, society and companies. Gansser & Reich, (2021) characterize AI as a technology designed to enhance human existence and provide