

Continued Use of Voice Assistants: A Cross-Cultural Study of Alexa Users

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Introdução

With the increasing global use of intelligent virtual assistants (IVAs), this study examines how cultural factors shape continued usage patterns. Technological innovations such as Amazon Alexa have transformed human-computer interaction, offering convenience, personalization, and integration into domestic routines. However, cultural values significantly influence how users engage with these devices. By comparing Brazil and the U.S., this study explores how cultural contexts moderate the influence of UTAUT2 constructs on continued IVA usage.

Problema de Pesquisa e Objetivo

Although UTAUT2 is widely used to explain technology adoption, few studies test its cultural sensitivity in continued use scenarios. This study aims to compare how constructs like performance expectancy, hedonic motivation, and perceived value influence continued IVA use in Brazil and the U.S. By doing so, it investigates the model's explanatory power across cultural contexts and provides insights into how technology acceptance varies cross-nationally.

Fundamentação Teórica

UTAUT2 expands the original model by including hedonic motivation, price value, and habit, offering a robust framework for consumer technology adoption. Prior studies emphasize that cognitive (e.g., performance expectancy), emotional (e.g., enjoyment), and contextual (e.g., cultural values) variables jointly shape usage. Cultural dimensions such as individualism/collectivism and uncertainty avoidance influence perceptions of technology's value, convenience, and utility, justifying cross-cultural application of UTAUT2.

Metodologia

This study employed a quantitative, descriptive-explanatory design to assess the continued use of IVAs based on the UTAUT2 model. Data were collected from 470 Amazon Alexa users (235 from Brazil and 235 from the U.S.) using a questionnaire built on validated UTAUT2 items. Constructs were measured via seven-point Likert scales, translated using back-translation. Structural equation modeling (SEM) and confirmatory factor analysis (CFA) were conducted using AMOS 26. Reliability, convergent, and discriminant validity were established for both samples.

Análise dos Resultados

Model fit indices indicated good fit in both countries (Brazil: RMSEA=0.056, CFI=0.953; U.S.: RMSEA=0.063, CFI=0.939). Hedonic motivation and habit significantly predicted behavioral intention in both contexts. Performance expectancy influenced Brazilian users, while perceived value was only significant among U.S. users. Effort expectancy, social influence, and facilitating conditions were not significant in either sample, reflecting shifting relevance of certain UTAUT2 variables in mature usage contexts.

Conclusão

UTAUT2 constructs explain continued IVA use, but their effects differ across cultures. Emotional gratification and habit were consistent predictors, with Brazil emphasizing experiential factors and the U.S. prioritizing efficiency and cost-benefit. These findings question the universalism of UTAUT2 and suggest integrating cultural nuances. For firms, personalization and culturally adapted strategies are essential for enhancing global engagement with IVAs and sustaining their long-term use.

Contribuição / Impacto

Theoretically, the study questions UTAUT2's universal applicability and proposes integrating cultural and emotional variables into adoption models. Practically, it guides firms to localize design, communication, and personalization strategies. Emotional appeals may work better in Brazil; performance-driven messaging may be more effective in the U.S. This cultural insight enhances user engagement, supports global market adaptation, and broadens the understanding of digital behavior across societies.

Referências Bibliográficas

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