

From Acceptance to Achievement: How Technology Perceptions Drive Engagement and Learning in a Business-Simulation Course

Synopsis

1. Problem/Innovation Studied

This study investigates the interplay between technology acceptance and experiential learning outcomes in business simulation courses, addressing a critical gap in empirical research. While business simulations are widely adopted in higher education, little is known about how students' perceptions of simulation technology influence engagement and learning. Integrating the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), and Kolb's Experiential Learning Theory, the study examines how perceived usefulness and ease of use impact student engagement and performance. The novelty lies in its empirical validation of these relationships, offering insights into optimizing simulation-based learning in international business education.

2. Importance for Educational Technologies

The study is significant for educational technology as it bridges the gap between technology acceptance and experiential learning, a rarely explored intersection. Business simulations require substantial institutional investment, yet their effectiveness hinges on student engagement, which is shaped by technology perceptions. By demonstrating that perceived usefulness strongly predicts engagement and learning outcomes, the research provides evidence-based guidance for educators and designers. It aligns with current trends in digital learning, emphasizing the need to integrate pedagogical and technological considerations to enhance experiential learning effectiveness.

3. Key Findings

Key findings reveal that perceived usefulness ($\beta = 0.39$, $p < 0.001$) and ease of use ($\beta = 0.22$, $p < 0.01$) significantly predict student engagement, which mediates learning outcomes. Technology acceptance factors explained 42.3% of engagement variance, with engagement further influencing perceived learning ($\beta = 0.57$) and objective performance ($\beta = 0.32$). Team-level dynamics also mattered, with shared technology perceptions enhancing collaborative outcomes. Notably, prior simulation experience improved both acceptance and performance, while gender differences were minimal except in self-reported engagement.

4. Implications

The study offers actionable insights for educators and designers: (1) Emphasize the real-world applicability of simulations to enhance perceived usefulness; (2) Provide technical support to improve ease of use; (3) Scaffold novice learners with pre-training to mitigate experience gaps; and (4) Monitor engagement metrics to identify disengaged students early. For researchers, it suggests longitudinal and cross-platform studies to generalize

findings. These implications can refine simulation-based pedagogy, ensuring technology investments translate into meaningful learning outcomes.