

INVESTIGATING THE IMPACTS AND INTERPLAY OF SYSTEM INTERFACE, COGNITIVE, AND AFFECTIVE FACTORS ON PURCHASE INTENTION IN SELF-SERVICE KIOSK ENVIRONMENTS

Background

Self-service kiosks, common in catering and retail, enhance efficiency by allowing independent transactions. In Hong Kong, they serve both locals and tourists. This study examines factors influencing customer behavior and purchase intentions to improve kiosk design and functionality.

Research Objectives

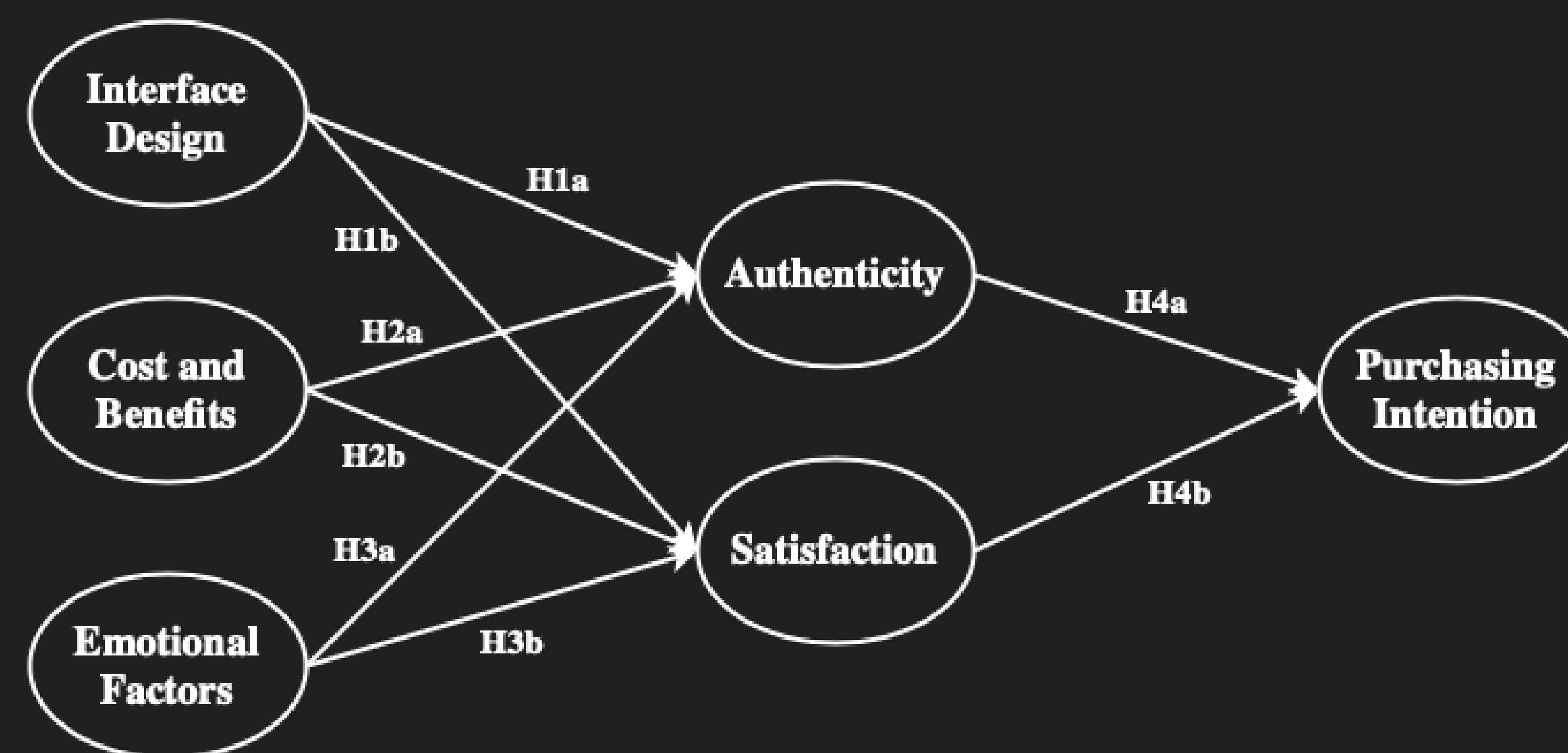
- Identify key factors that encourage or hinder consumer adoption and use of self-service kiosks.
- Offer guidance for enhancing user experiences, reducing risks, and increasing transaction authenticity and satisfaction.
- Contribute to the development of user-centric technologies and digital transformation in Hong Kong industries.

Methodology

Theory-driven: Formulate hypothesis and evaluate findings based on well-established theories (TRA, C-TAM-TPB, UTAUT, KAB Approach, SCT, ESQ)

Data-driven: Collect data from users by questionnaire and gather insights into the impacts of various factors

Research Model



Conceptual Framework

Interface Design: Security, Accessibility, Interactivity, Familiarity, Navigability, Ease of Use

Costs and Benefits: Perceived Risk, Affordability, Price Sensitivity, Rewards/Discount

Emotional Factors: Self-efficacy

Findings

VIF: All variables are smaller than **4.6**

→ Minimal multicollinearity among the predictor variables

Construct Reliabilities: All variables are greater than **0.7** (except price sensitivity 0.592)

→ Demonstrate strong reliability

AVE: All variables are above **0.5**

→ Satisfactory convergent validity for the measured constructs

HTMT: All lower than **0.9** (except navigability and ease of use 0.904)

→ All latent variables are independent from other

Conclusion

The research integrates theories to understand user purchase intentions in self-service kiosks, highlighting credibility, trust, and authenticity as key factors. For businesses, it emphasizes investing in user-friendly interfaces and transparency to build trust. Continuous user experience monitoring and practical benefits are more effective than emotional appeals in increasing kiosk usage.

Analysis Results

Path		Original Sample (O)	Standard Deviation (STDEV)	T Statistics	P values	Decision
H1a	Interface Design → Authenticity	0.323	0.089	3.645	0.000	Supported
H1b	Interface Design → Satisfaction	0.582	0.106	5.470	0.000	Supported
H2a	Costs and Benefits → Authenticity	0.389	0.093	4.189	0.000	Supported
H2b	Costs and Benefits → Satisfaction	0.257	0.100	2.565	0.010	Supported
H3a	Emotional → Authenticity	0.162	0.088	1.847	0.065	Not supported
H3b	Emotional → Satisfaction	-0.029	0.098	0.299	0.765	Not Supported
H4	Authenticity → Purchase Intention	0.400	0.104	3.844	0.000	Supported
H5	Satisfaction → Purchase Intention	0.289	0.126	2.299	0.022	Supported