Executive Summary

AI Readiness Scale (AIRS): Key Findings and Contributions

The Challenge

Organizations worldwide are investing heavily in artificial intelligence, yet research consistently shows a gap between AI adoption and realized value. Understanding what drives successful AI adoption requires validated measurement instruments that capture the psychological factors influencing technology acceptance in the AI era.

Research Purpose

This dissertation developed and validated the **AI Readiness Scale (AIRS)**: a psychometric instrument measuring AI adoption readiness among students and employed professionals. The study extended the established UTAUT2 framework with AI-specific constructs to identify factors predicting behavioral intention to adopt AI tools.

Key Findings

What Drives AI Adoption?

Predictor	Impact	Significance
Price Value	$\beta = .505$	p < .001 (Strongest predictor)
Hedonic Motivation	$\beta = .217$	p = .014 (Second strongest)
Social Influence	$\beta = .136$	p = .024 (Modest but significant)
AI Trust	$\beta = .106$	p = .064 (Marginal)

The model explained **86.1% of variance** in behavioral intention, exceptionally high for technology adoption research.

Surprising Non-Findings

Traditional UTAUT predictors that typically drive technology adoption (Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit) did **not** significantly predict AI adoption. This suggests AI may represent a distinct technology category where cost-benefit perceptions and engagement quality matter more than conventional utility considerations.

Population Differences

- Hedonic Motivation predicts adoption more strongly for students than professionals

- Professional experience strengthens the Price Value → Adoption relationship
- The scale demonstrates measurement invariance across populations, supporting cross-context applicability

User Segments Identified

Segment	Size	Profile
AI Enthusiasts	16%	High trust, high intention, low anxiety
Cautious Adopters	30%	Moderate trust, evaluative stance
Moderate Users	37%	Balanced profiles, pragmatic approach
Anxious Avoiders	17%	High anxiety, low intention

Research Contributions

1. **Validated 8-factor, 16-item AIRS instrument** with excellent psychometric properties (CFI = .975, TLI = .960, RMSEA = .065)

2. **Evidence that AI adoption psychology differs from general technology adoption**, challenging assumptions that established frameworks apply directly to AI contexts

3. **Foundation for future research** on AI adoption interventions, diagnostic applications, and cross-cultural validation

Limitations

- Cross-sectional design precludes causal inference
- Convenience sample limits generalizability
- Four proposed constructs excluded due to reliability issues, requiring refined measurement in future research

Implications for Future Research

The validated AIRS instrument provides a foundation for: - Longitudinal studies tracking AI adoption evolution - Intervention research testing strategies to increase adoption - Cross-cultural validation in diverse organizational contexts - Diagnostic applications linking readiness profiles to adoption outcomes