Understanding the adoption process of national security technology: An integration of diffusion of innovations and volitional behavior theories

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The ‘So what?’

• National security technologies (NSTs: like portable RN detectors) are here to stay.
• However, people don’t quite like them and voluntary adoption is low.
• What are the factors that contribute to attitude and adoption intention formation?
• How can we increase voluntary adoption?
NST: Portable radiation detectors (PRDs)

- Radiation detection devices carried on the person
- Ideal for comprehensive coverage of large areas at an affordable price
- Require substantial numbers of people (e.g. 10,000’s) to adopt detection devices in major urban areas

Sample PRD next to deck of playing cards
Theoretical Framework for Studying NSTs in Public

• Explanatory framework:
  – Diffusion of Innovations (Rogers, 2003)

• Predictive modeling:
    • Behavioral intention determination as a three-level process
    • External factors -> attitudes -> behavioral intention (~ actual behavior)
Conclusions

• No money, No problem.
• There was a positive (even though small) effect of barriers on perceptions of PRD characteristics: social stature.
• Anxiety had a stronger effect on perceptions of PRD characteristics and attitudes than barriers: “fear of the unknown”.
• People ARE willing to get involved.
• WE can set the mental map.
But does this work with Police?

• police are a unique population
• Motivations differ from general population
• Mandates are ineffective at establishing buy-in
Findings

Anxiety

Barriers
Risks
Non-monetary Incentives

Financial incentives
Attitudes
Perceptions
Key Results Police Specific

• Use of local expert and personnel
• Integration into existing routines
• Comprehension of purpose
• Device saturation is legitimate concern
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