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Resilience in Technology Substitutions: Costs and Opportunities for Incumbent Providers

Research-in-Progress Paper

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Abstract

Information technology development often includes constant upgrades, and, in some cases, it demands the substitution of entire information systems. Technology innovation is desirable to organizational success and the overall advancement of societies. However, reaching mutually beneficial outcomes for service providers and users requires a fuller understanding of users' reactions when discontinuing older services. While most of the work done concerns the IT implementation in organizations, the users' choice in voluntary services such as social media offers nuanced insights. Through a quasi-experimental design, this study delves into the incumbent carryover costs and opportunities brought about by an imminent information technology change. Specifically, technology unreliability and technology resilience are proposed as mechanisms leading to the resistance and use of other incumbent services, respectively. This study will use a four-wave data collection with the above perceptions and behaviors and analyze their causal relations with the random-intercept cross-lagged panel modelling technique. This study is expected to advance theory by posing technology resilience as a user's capability to override the negative reactions born from the deleterious effects of disruptive technology innovations. Practitioners will also benefit by reflecting on the actionable antecedents, cognitive rigidity and support seeking, to write policies and develop platform features that enhance their users' resilience prior to attempting a great transformation. The development of mutually beneficial strategies can protect the less technology savvy users while parallelly promoting and sustaining the long-term goals of the service providers.

Keywords: Technology resilience, support seeking, quasi-experiment, technology unreliability, Google