

Abstract

Smart and Secure: the IRIS project's Social Acceptance approach to enhanced Smart City Cybersecurity

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Smart cities reinforce the need for robust cybersecurity. The IRIS EU project enhances cybersecurity in urban transport and addresses societal concerns through a Social Acceptance of Technology model to assess potential societal reactions and guide technology development in a responsible manner.

Long Abstract

The integration of Internet of Things (IoT) technologies into urban services, has amplified the necessity for bolstered cybersecurity measures in contemporary cities. This demand emerges within the broader context of understanding the social implications of smart cities as complex sociotechnical systems. In the specific domain of smart transport, ensuring safety, security, system performance, infrastructure integrity, and citizen data privacy requires a concerted focus on cybersecurity technology integration and development. The IRIS project is positioned to address these challenges, aiming to enhance cybersecurity in urban transportation.

Unlike some technological solutions for sustainability, cybersecurity in smart transport does not face direct opposition, but requires a nuanced approach to social acceptance. Researchers and practitioners in the IRIS project are proactively addressing social acceptance concerns by developing a Social Acceptance of Technology (SAT) approach. SAT complements traditional user acceptance assessment methods with sociological insights, considering factors such as the social disruptiveness of technology, its impact on societal values, and the relevance of trust as a social reality. In such an approach, a multi-layered comprehension of awareness plays an important role in addressing societal perceptions and understanding.

SAT model offers a comprehensive framework for evaluating both social acceptance and social acceptability, depending on the stage of technology development and implementation. It enables the assessment of societal reaction to technological innovation (support, rejection, contentiousness), as well as proactive consideration of potential societal challenges by integrating social perspectives into technology design and implementation strategies.