

SOCIETAL ACCEPTANCE OF URBAN DRONES

BRIEFING REPORT

CONTEXT

This briefing report series are targeted at policy makers and industry members in the fields of technology governance and innovation management. Our goal is to raise awareness of the importance of societal acceptance, and to shed light on how to address it based on our own research findings.



OBJECTIVE

Societal acceptance of the use of drones in urban areas is crucial for their successful integration into society. This literature study aims to identify the current knowledge gap and the interconnection between existing knowledge and popular public discourses.

LITERATURE STUDY

- Identify current knowledge gap over the topic
- Provide insights for informed decision-making
- Support evidence-based governance strategy

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KEY FINDINGS



- > The top three acceptance factors according to this literature study are **Privacy, Safety, and Policy & Regulation**. This is followed by **Technical Efficiency, Socio-Demographic Factors**, as well as the implementation of **Trust, Accountability & Transparency** measures in drone operations.
- > The acceptance factors identified in this literature study indicate alignment with prevalent discourses about public perceptions of urban drones. This overlap highlights **the relevance between public perceptions and societal acceptance factors**, such as the aforementioned most important influencers.
- > Competing visions regarding the societal implications of urban drones between different stakeholders arise across a wide spectrum of applications. **The specific use case of drones and the identity of the institution or person utilising them** play a critical role in influencing societal acceptance.
- > Factors affecting societal acceptance include both internal and external aspects. It is necessary to adopt a **twofold approach to examine both the macro-level societal influencers, such as environmental impacts, and the micro-level individual concerns, such as social norms.**

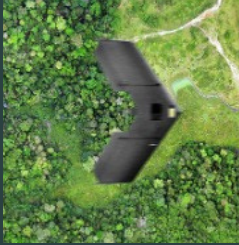


IMPLICATIONS



- > It is important to **differentiate drone use based on their specific purposes, users and benefits to society** when considering public perceptions and acceptance.
- > **Contextual framing of drone use case and their usefulness** is essential to address the concerns associated with their implementation which, in turn, has an impact on their acceptance.
- > It is key to **address the information dissemination challenges** through means of effective communication, proactive public engagement, and accessible knowledge transfer about drone operations, such as flight route or noise level.
- > Improving societal acceptance of urban drones requires **prioritising transparency, accountability, and trust-building initiatives with the public.**
- > It is necessary to consider not only the apparent technical risk factors, but also the **broader influencers of external, operational, socio-economic, and emotional factors** when evaluating societal acceptance.

RECOMMENDATIONS



DO > Continue to foster multi-stakeholder engagements to bridge gaps between different stakeholders involved in drone use.

This approach helps enhance understanding of diverse perspectives, promote knowledge exchange, and facilitate collaborative efforts toward smooth integration of drones in urban areas, as well as positive acceptance of them by society.



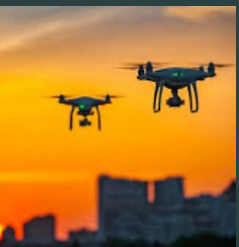
DO > Ensure to implement measures, strategies, and governance models that consider the context of drone use and address the actual needs of the public.

Adopting appropriate integration approaches tailored to specific contexts helps enable effective management of drone operation, improving societal acceptance while accelerating value-based innovation.



DO > Make an effort to develop comprehensive awareness-raising programs to increase public understanding about drones and their applications.

This approach helps empower individuals involved in urban drones to make informed decisions, which helps alleviate emotional and psychological concerns associated with novel technologies that may be unfamiliar to the public.



DO NOT > Overlook the broader environmental, health, and quality of life impacts when integrating drones into urban environments.

Implementing measures to proactively mitigate potential negative effects on wildlife, environment, public space, and individual well-being associated with the proposed drone use helps invoke positive perceptions of the public.



DO NOT > Neglect the socio-economic disparities in the introduction and adoption of the drone technology in society.

This approach helps ensure equitable access, fair benefit sharing, and affordability of drone applications to diverse populations, regardless of age, gender, ethnicity, socio-economic status, and cultural or educational backgrounds.