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 survey study focuses on the experts in fields such as robotics, aviation, mobility, and smart cities, to offer insights that will guide the development of strategies and policies for drone implementations.

EXPERT SURVEY STUDY

Identify expert views across sectors & domains

- Provide insights for informed decision-making
- Support evidence-based governance strategy

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KEY FINDINGS



> There is a diverse spectrum of opinions about drone use among experts of different domains and sectors. This suggests the need for inclusion of a wide scope of expertise when developing policies related to urban use of drone.

> Awareness-raising activities are crucial to inform the public about the drone technology and its applications. It is currently challenging, though, to collect useful information for public education due to regulatory constraints on drone operations.

> It is important to address the practical aspects for assessing societal acceptance of urban drones, such as resource management and information sharing, on the one hand, and to handle the regulatory aspects which may potentially interfere with drone operations, on the other hand.

> Acceptance factors such as safety, privacy, noise, and regulation can be deeply connected. The interrelated dynamics among the acceptance factors plays a crucial role in understanding how society at large perceives urban drones.

> While technical knowledge about drones is vital, a comprehensive framework of acceptance factors helps society to better assess drone usage from the social and human dimensions.



IMPLICATIONS



> Experts tend to place less importance on the general public's views and concerns about drones, such as noise or malicious use, and focuses more on the practical sides of drone operations, such as business cases and financial viability.

> It is important to recognise the dynamical complexity of acceptance factors beneath the surface, and take more nuanced approaches to support smooth integration of urban drones.

> Experts suggest evaluating drones against the specific context in which they are used, including the purpose of usage, the operators involved, and the health and environmental impacts of the application.

> The sector- and domain-specific viewpoints of experts imply that a one-size-fits-all approach to drone regulation is not effective, compared to context-appropriate strategies that are more responsive.

> Experts advocate for more public education efforts to be made, such as targeted information campaigns and broader public engagement activities.

RECOMMENDATIONS





DO > Reflect on current regulatory approaches.

Adapt regulations to be more flexible to allow for more pilot testing and data collection. This will support communication and education efforts in the field, increasing public understanding about the drone technology and its operations.



DO > Invest in public education and communication.

Timely develop education programs to improve public understanding of new technology. This proactive approach will clarify doubts of the public around negative consequences of technology, while increasing their awareness to its benefits.



DO > Develop strategies tailored for specific stakeholders.

Recognize and respect the different priorities across sectors and adjust strategies accordingly. This will help enable needs to be met and interests to be aligned across stakeholder groups, paving the way for better acceptance in society.



DO NOT > Work in silos in framework development.

Promote collaboration among academia, industry, and government to co-develop framework to support informed policymaking. This collaborative approach will connect concepts with practice for more responsive governance and wider benefit to society.



DO NOT > Underestimate the power of public engagement.

Actively engage the involved community in drone projects helps improve awareness, preventing misunderstanding and distrust from developing. This participatory approach will enhance public sensitivity which, in turn, support societal acceptance.