

Balancing security and usability in mobile applications

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Mobile applications have become a ubiquitous part of daily life for millions of people. They have transformed the way in which we communicate, share information, do business, entertain ourselves, and

manage many aspects of our lives from shopping and transport to holidays and health care. A study in the *International Journal of Electronic Finance* has looked at security issues associated with personal data processing in this interconnected landscape.

Ayush Goel and Gurudev Sahil of CHRIST (Deemed to be University) in Pune, Lavasa Campus, India, have delved into the complexities of data privacy and security, citing issues such as diverse data and sensors in [mobile devices](#), the use of various identifiers, and the monitoring of consumers.

One key concern raised is the struggle to enforce data protection regulations, such as the General Data Protection Regulation (GDPR) rules, within the mobile application ecosystem. These pose significant challenges for developers and service providers where applications may not function as they nor even users would wish them to when they are designed to be fully compliant with GDPR requirements.

The challenges extend way beyond the technical aspects of mobile application development and implementation. They can have obvious legal repercussions and, of course, inherent issues of individual and corporate privacy. The new study acknowledges the benefits of [mobile applications](#) but also emphasizes the need for a stronger and yet somehow more flexible regulatory framework that will allow the applications to work as they should without comprising security and data protection and certainly without breaking any laws.

While softer regulations are acknowledged for fostering innovation, the study warns that current approaches may fall short in addressing potential data misuse with a particularly alarming problem, data terrorism, being at the forefront of the team's concerns.

There is a delicate balance between the benefits of having various

mobile applications available to legitimate users and ensuring that their [fundamental rights](#) are upheld, but also in precluding abuse, fraud, and the aforementioned data terrorism. The team suggests that regulators must design a constructive framework to address the various issues, allowing a balance between innovation and safeguarding users against data misuse to be put in place.

More information: Ayush Goel et al, Growth of mobile applications and the rise of privacy issues, *International Journal of Electronic Finance* (2023). [DOI: 10.1504/IJEF.2024.135162](https://doi.org/10.1504/IJEF.2024.135162)

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