# Android’s subtle security updates risk alienating users on older devices



With every annual release, the anticipation surrounding Android updates fuels excitement among users eager to enhance their smartphone experience. Google consistently showcases a variety of new features during major events like Google I/O and Made by Google, but the subtler, yet impactful updates can often slip under the radar. This oversight can lead to a rather mixed bag of outcomes: while some new features bring significant enhancements, others can inadvertently disrupt functionality, especially for devices that are a few generations old.

A recent update to the Play Integrity API illustrates this point. Designed to enhance security, this update allows applications to perform integrity checks on the devices they're operating on. If a device fails these checks, apps may be rendered inoperable. This development is particularly concerning for users still operating on Android 12 or earlier, as they may face diminished app functionality or complete failure to run essential applications. While Google claims this will encourage users to keep their devices updated for better security, the reality is that many may find themselves forced into an upgrade they may not have otherwise considered.

This focus on improved security often leads to inconvenient realities for users, especially those with older devices. According to Google's official announcements, newer integrity checks require devices to have recent security updates and, in some cases, a locked bootloader to pass the integrity checkpoints. These more stringent requirements could signal trouble ahead for a substantial number of users, particularly as many millions of devices worldwide may not meet the new standards. In essence, while such measures aim to bolster security, they also risk alienating those who cannot upgrade frequently.

On a more positive note, advancements in biometric security have emerged alongside these updates. The Pixel 8 series introduced a significant enhancement in its Class 3 Face Unlock feature, now empowered to facilitate secure authentication in a broader range of applications—including banking apps. This integration, fueled by the Tensor G3 chip and advanced AI algorithms, marks a pivotal shift in how users interact with their devices. Previously limited to simply unlocking the device, the Face Unlock feature now bolsters security for financial transactions, reflecting a growing trend towards embracing AI in everyday functionalities.

Despite these advances, not all users may benefit equally. With Google's recent introduction of its Gemini voice assistant, a distinction has been made that could leave older devices in the dust. As Gemini climbs in popularity, functionalities tied to the legacy Google Assistant may linger only for users running compatible hardware. This could affect everything from smart speakers to voice-activated services, forcing users into tough decisions: accommodate limited older assistants or invest in newer devices that can harness Gemini’s capabilities.

Ultimately, the small, behind-the-scenes features buried within Google's updates often wield the greatest influence on how users experience Android. While flashier features tend to steal the limelight, the nuances hidden in detailed specifications and updates should not be underestimated. Keeping an eye on these intricate changes and staying informed through the Android Developers Blog can be invaluable in navigating the complexities of what these updates mean for individual users. Therefore, it becomes crucial to remain vigilant and informed, as the smallest details can profoundly affect functionality and overall satisfaction with the platform.

As the landscape of Android continues to evolve, the dichotomy of innovation and accessibility remains at the forefront, challenging users to stay updated or risk being left behind.

### Reference Map

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Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.androidpolice.com/googles-small-feature-updates-often-have-the-biggest-impact/> - Please view link - unable to able to access data
2. <https://developer.android.com/google/play/integrity/improvements> - This official Android Developers page details the improvements to the Play Integrity API, emphasizing the integration of hardware-backed security signals through Android Platform Key Attestation. These enhancements aim to make integrity checks more robust and reliable, ensuring that apps can better assess the trustworthiness of the user's environment. The page also outlines the new 'meets-device-integrity' and 'meets-strong-integrity' verdicts, which require devices to have a locked bootloader and recent security updates, respectively, to pass integrity checks.
3. <https://android-developers.googleblog.com/2024/12/making-play-integrity-api-faster-resilient-private.html> - In this blog post, Google announces significant updates to the Play Integrity API, focusing on making it faster, more resilient, and more private. The improvements include the use of hardware-backed security signals via Android Platform Key Attestation, which enhances the difficulty for attackers to bypass integrity checks. The post also mentions the introduction of new verdicts like 'meets-strong-integrity' and 'meets-basic-integrity,' providing developers with more granular control over app security based on device integrity.
4. <https://beebom.com/google-play-integrity-lock-out-banking-apps-android/> - This article discusses the potential impact of Google's new Play Integrity API changes on banking apps for Android users. It highlights that devices running Android 13 and above will receive new verdicts starting May 2025, including 'meets-strong-integrity' and 'meets-basic-integrity.' These changes could lead to banking apps refusing to work on devices that haven't received updates in over a year, potentially affecting a significant portion of Android devices worldwide.
5. <https://www.phonearena.com/news/face-unlock-on-the-pixel-8-series-can-now-work-with-payments-and-banking-apps_id151258> - This article reports that Face Unlock on the Google Pixel 8 series has been enhanced to work with payments and banking apps. Previously, Face Unlock was limited to unlocking the device, but with the Pixel 8, it now meets the highest Android biometric class, allowing users to authenticate within apps like Google Wallet and banking applications. This advancement is made possible by the Tensor G3 chip and advanced machine learning algorithms.
6. <https://www.biometricupdate.com/202310/pixel-8-boasts-improved-biometrics-with-face-unlock> - This article highlights the improved Face Unlock feature on the Google Pixel 8 series, which now meets the highest Android biometric class requirements. The upgrade allows users to securely authenticate sign-ins to apps and make payments using Face Unlock. The Pixel 8 and Pixel 8 Pro utilize AI and machine learning in their selfie cameras to enable this secure Face Unlock, marking a significant advancement in biometric authentication for Android devices.
7. <https://www.forbes.com/sites/zakdoffman/2025/01/02/google-play-store-update-why-you-need-a-new-phone-in-2025/> - This Forbes article discusses the implications of Google's Play Integrity API updates on Android devices. It emphasizes that the new API changes, which will be enforced from May 2025, could lead to older devices being locked out of certain apps, including banking and finance applications. The article advises users to ensure their devices are running Android 13 or higher to maintain app compatibility and security.