How iOS 7’s AirDrop Could Transform The Way We Share

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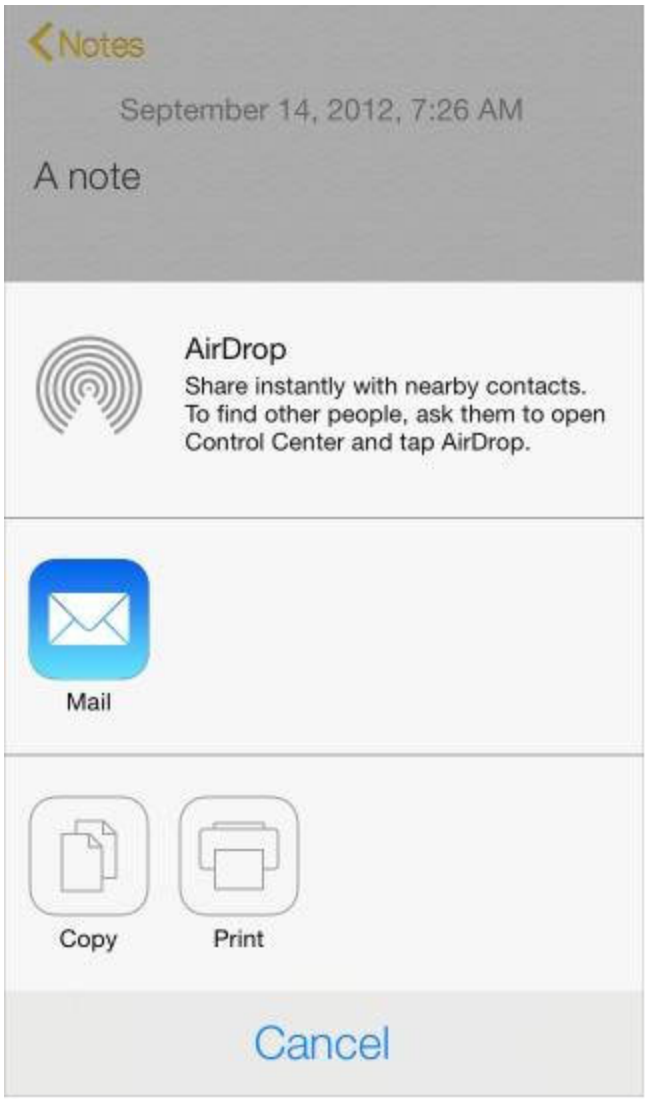

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Despite the persistent gnashing of teeth over Jony Ive's re-making of iPhone's apps, colors and iconography in the upcoming iOS 7, the real story is the many new features that Apple is incorporating into its highly lucrative mobile platform.

Features such as wireless content sharing AirDrop could significantly impact user sharing behavior – at home, at work, and everywhere else. It's not particularly revolutionary. Rather, AirDrop smartly

leverages the core strengths of Apple's unified ecosystem.

AirDrop, long available on Macs, is being offered with Apple's iOS 7 – the next version of the popular operating system for iPhone, iPad and iPod Touch. According to Apple, AirDrop lets users share photos, videos, web pages, contacts – "and anything else from any app with a Share button."

AirDrop sharing might include:

- A retailer "airdropping" a coupon into your Passbook app.
- Multi-player games with strangers on a train.
- Sharing meeting notes in an office setting.
- Guests sharing their favorite videos of the bride and groom during the ceremony.
- App developers might offer in-app freebies to customers who agree to "airdrop" a trial version of the app from their iPhone onto their friend's iPhone. Advertisers may do the same.
- Families might share a variety of notes, lists, pictures and more across a plethora of "iDevices."

Ecosystem Benefits

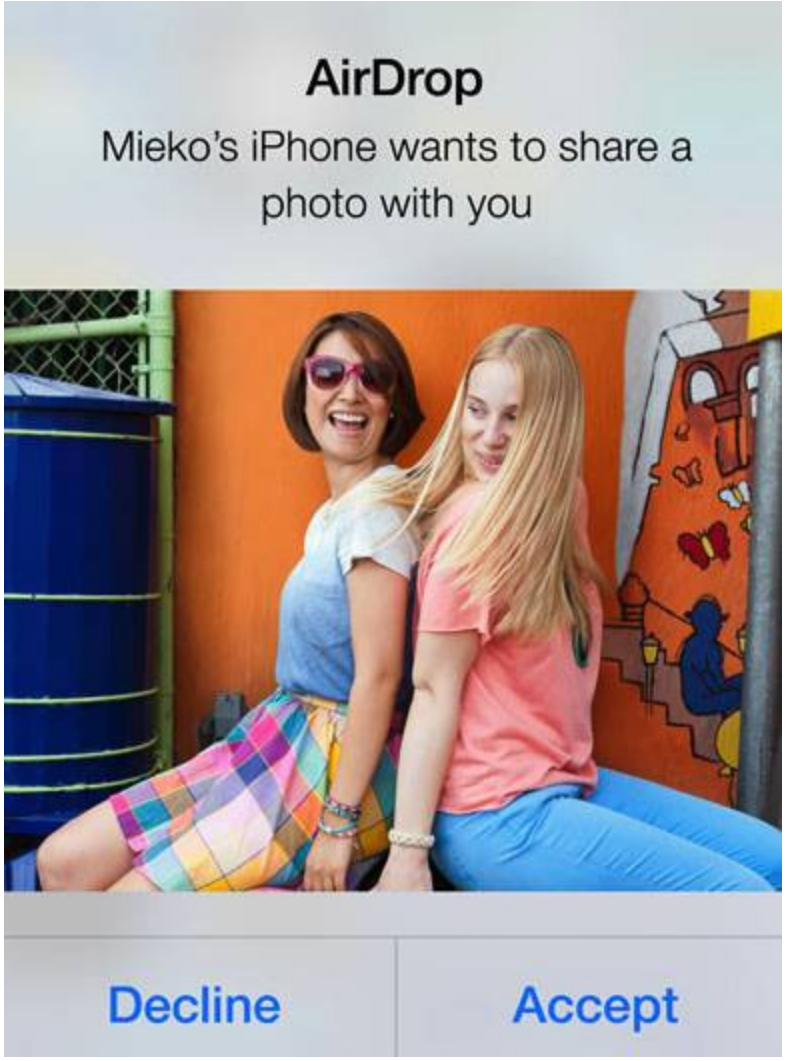
There are some very obvious caveats to all this, of course, despite the potential. Chiefly, in practice, AirDrop may ultimately deliver limited user value.

After all, smartphone-to-smartphone sharing already exists, yet have you ever actually seen people 'bump' their smartphones? This Samsung commercial is clever, but do you know anyone who's actually used this feature that was not on television?

AirDrop, however, has several advantages:

1. It comes pre-installed on iOS 7.
2. Every device with AirDrop will offer the same user experience.
3. It is fully wireless – no physical bumping of devices necessary.

Android Beam, Samsung's S Beam, and apps like Bump, all require the devices touch each other, one-to-one, to initiate a file transfer. Even the more widely available NFC (near field communication) standards require devices physically touch one another or be in very close proximity, typically a few centimeters. AirDrop requires no touching and can transfer files one-to-many.



AirDrop works by moving media through the cloud, via Apple's iCloud. It then establishes a Wi-Fi Direct connection between the devices to move files between points. The use of iCloud allows AirDrop to know other users' locations and theoretically makes file sharing easier. In contrast, Android Beam creates a connection between two devices and then transfers media through Bluetooth. Samsung's S Beam is similar, but uses NFC to establish the connection and then uses Wi-Fi Direct. Samsung's new Galaxy S4 has the ability to share content (such the same song on several different devices with one person acting as a DJ controller) in much the same way as AirDrop works.

AirDrop can assure everyone of its users the same exact steps to expedite the activity. Tap the "Share" icon. AirDrop reveals available users nearby. Tap their avatar and the file is sent.

This is where Apple's ecosystem control delivers enhanced benefits to users. Two users wanting to transfer files will be able to open the same app, at the same time with the same results. While Android Beam (or the very similar S Beam) is present on all Android phones running version 4.0 Ice Cream Sandwich or higher, the interface between smartphones from different manufacturers does not lend itself to a common experience.

Analysts estimate that at least 550 million devices are now running iOS 6. If Apple can just as quickly transition them to iOS 7, that's a massive potential user base with which to AirDrop the latest viral video, family photo, office gossip, or hit song.

The Ecosystem Giveth, The Ecosystem Taketh Away

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Success will take time, if it is to happen at all. For AirDrop to work, users must have:

- iOS 7
- A *newer* iOS device – iPhone 5, iPad Mini, iPad (4th generation), iPod Touch (5th generation)
- An iCloud account

In addition, users must be physically close to one another – although AirDrop transfers should work over a rather large area, somewhat like accessing Wi-Fi across different rooms in a house.

Apple's marketing for AirDrop focuses on photo sharing. Given the limitations of the service, at least at launch, this is no doubt a wise move to help prompt usage. Photo sharing services are hugely popular, after all.

Security Concerns

Users can choose to accept AirDrop files from their contacts, or from anyone with the appropriate device, or not at all.

Security will be an obvious concern for most users. Apple states that AirDrop files are "fully encrypted." Even still, it seems likely that someone masquerading as a contact – perhaps posing as a friend seated at the other end of a large college classroom – could send a malicious file that the recipient unwittingly accepts. There are no doubt other potential opportunities for ill intent.

Wireless analyst Jack Gold said: "security will clearly be an issue, despite Apple always claiming it's not. Things get hacked."

New Modes of Sharing

Despite these limitations, AirDrop possesses the *potential* to spur new forms of sharing digital content -and thus, potential new applications and even new businesses could spring from AirDrop.

According to mobile market analyst Chetan Sharma, AirDrop should prove a "better way to share than text or email." He also noted that AirDrop could enable other "communication modes" such as "airdropping a coupon instead of email them."

Again, the overarching concern, Sharma says, is that users must have very easy controls over what content they choose to accept, when and from whom. Otherwise, it becomes little more than spam.