M-Wallets: Not Ready Yet

By: Peter Rysavy

Although Internet-based e-wallet systems have not seen widespread acceptance, wireless m-wallets will prove to be a completely different story. You can expect to see every major wireless operator, Internet service provider (ISP), and portal deploy some sort of wallet mechanism over the next year. Many already have. The reason: convenience. Simply, a wallet is a database of information about a user, usually the user's name, credentials (typically, the user name and password), the user's credit card information and shipping information. A user can initially enter this information using a Web browser on a "MyWallet" Web page hosted by the operator. The user can then conduct an m-commerce transaction with his mobile device by simply entering a password (possibly in concert with having a Subscriber Identity Module in the mobile device), selecting which credit card to use and which shipping address to use. Because all this information is already in the wallet database, the user is spared the difficulty of entering this information via the limited interface of a mobile device. That also means the credit card information does not have to travel over the air. Moreover, a single sign-in can let the user shop from multiple merchants and then conduct multiple transactions with a single click.

CONVENIENCE SELLS

It's this convenience that makes mobile wallets so compelling. Remember, convenience sells. Forgot to buy flowers for your spouse for your anniversary - well, now you can do so (surreptitiously) in a few moments in the midst of a business meeting. This level of convenience is not required for desktop e-commerce applications, where users have a rich user interface, but is mandatory for m-commerce, where applications will fail if they demand too many button presses. There are well over a dozen companies providing mobile wallet systems, with well-known ones including Snaz Commerce Solutions, Aether Systems, InfoSpace, and Qpass. Carriers are buying third-party wallet solutions instead of building their own to speed their entry into mobile commerce. Moreover, the wallet operator has relationships with a large pool of merchants, so by working with the wallet provider, a carrier can quickly make these merchants available to its subscribers.

NOT SMOOTH SAILING

But there are several difficulties that could inhibit the adoption and use of m-wallets.

A wallet collects transaction information that it passes on to the merchant, but the actual charging against a user's credit card is done by the merchant, not the wallet system. Why? Because, the merchant ultimately owns the customer relationship. The merchant is the one that ships the product and must accept returns if the customer is dissatisfied. This is how the relationship should be, but it has led to merchants using a wide variety of commerce systems. Because, typically, each merchant uses a different interface, the wallet provider must manage hundreds of unique interfaces, not to mention associated business logic that can vary widely. That's a lot of work for the m-wallet providers. There is one standard that partially addresses this interface, Electronic Commerce Modeling Language (ECML), but only a limited number of merchants have implemented this standard. Conversely, the large number of mobile wallet systems makes it confusing for merchants. Over time, carriers may develop their own wallet mechanisms as well. Ultimately, financial institutions such as banks may band together to create their own systems. Although slow to enter this market, financial institutions provide one attribute crucial to the success of this market - trust - and could prove formidable competitors. In the meantime, though, there are too many systems.

Finally, security standards and implementations for m-wallets still need to be figured out.