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Making Mobile Payment Work for Everyone

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Making Mobile Payment Work for Everyone

The key is cooperation among *all* the stakeholders.

by Roman Friedrich, Johannes Bussmann, Olaf Acker, and Niklas Dieterich

For most of the world, turning the dream of mobile payments into reality has long met with frustration. M-payment — shorthand for using a cell phone to pay for goods and services — has morphed over the years. In its early form, it involved using a voice or SMS connection to initiate and settle a transaction; lately it has evolved into a far more convenient process that turns cell phones into one-step instant payment devices. Customers simply wave their phones over a sensor and the transaction is completed on the spot. For consumers, mobile payments mean no more fishing for credit cards or cash, and, with prepaid services, no more monthly bills to worry about. M-payments are catching fire in Japan and Korea, but have so far failed to spark much interest in Europe and the U.S. The efforts in those two regions have faltered mainly for two reasons: The technology wasn't in place, and the stakeholders — banks, credit card issuers, handset makers, and telecommunications companies — have worked at cross purposes. But all that's changing. Recent advances in handset, chip, and mobile network technologies and upgrades to the point-of-sale infrastructure along with better teamwork among the players have dramatically improved the environment for mobile payment solutions across the globe.

Lessons from Asia

To understand why m-payments face an uphill battle in Europe and the U.S., it's instructive to understand why they're taking off in Japan and Korea. The chief driver of mobile innovation in Japan is NTT DoCoMo, far and away the country's leading wireless provider. So dominant is its position that DoCoMo can impose a new system from the top down, as it did in 1999 with i-mode, its breakthrough digital data service, which now claims 45 million subscribers. Although i-mode did not initially provide for mobile payments, it successfully laid the groundwork with customers for that functionality.

The latest step in the evolution of the cell phone is DoCoMo's venture with Sony. The wireless company is now implanting Sony's FeliCa contactless chips, which were initially used in public transit smartcards, into its cell phones, giving customers the ability to pay for train fare, theater tickets, and a growing array of other products by passing their phones over a sensor. The results are impressive: Five months into the program, at the end of 2004, DoCoMo had sold more than 1 million FeliCa-equipped phones and expects to hit 10 million by the end of 2005, exceeding the rate of adoption of the wildly popular i-mode.

The important point here is that NTT DoCoMo's complete dominance of its market allows it to impose its new cashless, contactless payment scheme from the top down with relative ease. Customers, who've had six years to get used to using their phones as lifestyle tools rather than just as communications devices, have demonstrated that they're eager to take advantage the m-payment function. Merchants want to tap into a large and growing market (DoCoMo tempted those who weren't initially ready to pay for the new point-of-service technology with subsidies). And DoCoMo didn't need the buy-in of banks and credit card companies at the outset to make the whole thing fly (although it does plan to work with both to expand its business beyond the prepaid model).

The situation in Korea is slightly different. All three of the country's biggest mobile operators, SK Telecom, KTF, and LG Telecom, are now offering cell phones that can be used as credit cards and FeliCa-style prepaid smartcards. While telecommunications companies are driving the new systems, they're working arm-in-arm with credit card companies, which are taking care of the financing and operations, taking less than half their usual 2.5 percent cut. One percent goes to subsidize the cost of the phones for customers, and 0.3 percent goes to the telecoms, which own the m-payment technology, leaving just 1.2 percent for the credit card companies. But, for now at least, that highly cooperative arrangement works well for everyone as the stakeholders join together to build their customer bases and increase revenues.

Consumers seem to be flocking to the new offerings. In the case of SK Telecom, which commands slightly more than half the market, the wireless operator worked closely with the Hyundai credit card company and Woori Bank to set up a network for its phones equipped with the Moneta chip. Since its launch in September 2003, SK Telecom's offering alone has attracted 1.2 million subscribers, and that number should swell with the company's alliance with MasterCard PayPass, which will expand Moneta's usefulness worldwide.

The Challenge outside Asia

Telecoms are driving the m-payment revolution in Japan and Korea, but it will be a lot harder for them to follow the same path in the U.S. and parts of Europe where payment cards are already a deeply embedded fixture of consumer behavior, accounting for 70 percent of retail transactions. In these places, any telecom wishing to establish an m-payment system is up against a population that isn't eager to move away from its familiar payment systems and might never have thought of cell phones as payment devices. (The road will be easier in Germany and other central European markets where cash accounts for 60 percent of retail transactions, mostly because merchants are eager to switch to cashless systems at the expense of handling currency.)

All this means that wireless operators that attempt to go it alone, as DoCoMo did, risk stumbling. To succeed, they will have to hew more to the Korea example and work closely with the incumbent financial players — banks and credit card issuers — along with handset manufacturers and retailers to establish a viable mobile payments infrastructure. Failure to work cooperatively will almost certainly lead to the kind of fate suffered by SIMPAY, a joint venture of several European telecoms, which just closed it doors, having reportedly been brought down by intractable differences among its members.

Signs for better partnership are already evident. Telecoms will find willing partners in the banks, which are facing greater competition than

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ever and decreasing margins in their traditional credit card businesses. They're hungry for new ways to boost their card payment volume, and that's an opportunity for wireless operators that seek to launch cooperative plays. Device-enabled payments leveraging the existing card products and payment infrastructure are the natural next step in that direction. Citibank's recent move to distribute 2.5 million MasterCard PayPass-enabled devices gives evidence of banks' willingness to play. The stage is set for the rise of mobile payments across the globe.

An Industry Consortium Approach

The single most important step in building a successful m-payment system is to set the incentives for all stakeholders. Without this, there will be no progress. Each of the participants, furthermore, must accept certain fundamentals and step up as needed for the good of the entire enterprise:

- **Banks and credit card companies** (and incumbent stakeholders like acquirers, which bring new merchants into the network and process transactions, and network operators, which equip merchants with POS technology) must leverage existing value chains, rather than build new competitive solutions. They must also evaluate ways to let mobile telecoms participate in collaborative value generation.
- **Mobile operators** must consider new mobile payment systems in the context of new ways to open up revenue streams, especially from monthly m-payment subscription charges or per transaction fees. Operators must also take full advantage of the positive side effect of embedding the mobile phone even deeper into the life of the subscribers — a significant motivator in the Japanese model.
- **Handset suppliers** must embrace new approaches and start to consider active integration of mobile payment capabilities into product road maps and line-ups. Mobile payment capabilities are seen by some as the next big thing to drive handset replacement, making standardization and compatibility across operators and platforms critical to preserve user attractiveness and scale benefits.
- **Merchants** must use their vast experience with cashless payments to drive further cost decreases that accrue from giving up cash, and to offset POS technology upgrade costs.
- Finally, it needs to be demonstrated to **mobile phone users** that mobile payment is much more attractive than other more familiar payment schemes. The bundle of convenience aspects (safe, secure, available, fast, transparent, etc.) needs to be packaged and sold to target groups individually.

Although meeting these critical success factors is a balance not easy to achieve, it is worth the effort. An ecosystem play, tailored to the geography to be served, will succeed and change today's payment landscape. +

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