

# Mobile Coupons as Incentives for Network Carriers to Subsidize NFC Cell Phones

By Ismaila Wane

**TUCSON, ARIZONA (June 20<sup>th</sup>, 2008)** – According to Juniper Research, an industry analyst firm, about 3 billion mobile coupons will be distributed by 2011. The projected volume was associated with \$7 billion dollars in available savings for mobile consumers. Interestingly enough, Juniper identified NFC technology as one of the key enablers for the fast growth of the mobile coupon market. With about 35 million NFC-compatible payment cards already issued in the U.S. according to the Smart Card Alliance, the installed infrastructure is rapidly growing to keep up with the trend. The main motivation for a retailer or any other merchant store for upgrading its reader infrastructure is to be able to reduce significantly transaction time at the point of sale (POS) in comparison to cash or magstripe cards. Visa reports that NFC-based purchases are 25 percent faster than cash transactions. This may justify the fact that some 80,000 merchant stores are already equipped with over 400,000 NFC-compatible readers although some retailers still request a stronger value proposition to upgrade their hardware.

## Market Readiness for NFC

From a technical standpoint, NFC is in fact ready today to be deployed by any network carrier ready to subsidize NFC-enabled cell phones by absorbing the additional costs incurred by NFC chipsets integrated by handset manufacturers. The chief remaining issue is then simply a financial matter although some may argue it remains to be seen when Qualcomm, will officially add NFC chipsets in its reference designs to enable next generation CDMA phones to be NFC compatible. The strategic acquisition of Firethorn, an Atlanta-based mobile banking and payment startup by Qualcomm in last November may be speculated as a hint about Qualcomm's plans regarding NFC.

Nevertheless, finding the right business model for potential NFC applications is in fact what is keeping mostly network carriers from accelerating the commercial availability of NFC cell phones. The network carriers need to have a clear return on investment, and a real increase in their ARPU to justify their investments.

Let's use the following business scenario to illustrate this analysis:

A US network carrier decides to subsidize 5 million NFC cell phones by paying an additional \$10 per NFC chipset to the handset manufacturer. This translates to a total of 50 million dollars paid upfront by the carrier for adding NFC capability in its subsidized cell phones. This investment also incurs additional expenditures such as training, customer service and other indirect expenses. To recoup from that investment, the carrier needs logically to identify clear revenue streams monetizing the mobile wallet while working out the complexity of mobilizing each vertical market and its stakeholders.

Provisioning credit cards into cell phones is one of the most actively suggested business case by the NFC industry. It is worth noting that the network carriers will not generate any revenue in terms of credit card transaction fees at the point of sale but only provisioning fees. In this illustrative business case, an MNO (or its TSM) may charge \$5 to the bank for each mobile wallet user that has one credit card provisioned into his/her cell phone while the average lifespan of a credit card is 2-3 years. Depending on the financial agreement, this means that the MNO will not even break even its initial investment on the NFC chip throughout the 2 to 3 years of operations provided consumers do not request the re-issuance of their credit cards within that timeframe and assuming that the average subscriber has 1 credit card in his/her phone. Clearly, it makes sense that from a business model standpoint network carriers would not be eager to launch NFC services, especially when there is no real consumer demand yet to justify it.

### **Opportunity for NFC-Based Mobile Coupons**

Taking a close look at the staggering 300 billion coupons in circulation annually in the US compared to only less than 1 billion credit cards, it is legitimate to explore the coupon industry as an another vertical market to justify the subsidization of NFC cell phones. Coupon lifespans average 6-8 weeks, which implies a path to potential faster recurring revenues. In fact, coupons may be regarded as another widespread form of legal tender in the U.S., and yet methods for their handling and redemption are antiquated which makes NFC the best candidate to allow the coupon industry to finally shift fully to the digital age.

Contactless Data [author's current venture], may be introduced here as an illustrative model to explore the potential return on investment for carriers participating in the mobilization of the coupon industry with NFC technology. Founded in 2007, the company has developed a secure and advanced technology allowing mobile coupons to leverage NFC technology and bridge the current redemption gap in the mobile coupon space. This advance would unleash electronic coupon processing (coupon industry's Holy Grail) as part of the logical life cycle of mobile coupons. The company's platform is referred to as MobiFetch, implying the pull nature of its mobile coupon repository for consumers via an intuitive, PIN-protected on-device wallet application.

Contactless Data has pioneered a Pay-per-Redemption (PPR) business model for mobile coupons which appears to be a more efficient pricing model for coupon issuers composed of advertisers, Consumer Packaged Goods (CPG) manufacturers and other entities who launch coupon campaigns. A revenue sharing model for all stakeholders in the coupon value chain has been incorporated to incent this mobilization.

Using an NFC-enabled cell phone, the customer can securely make a payment with an embedded credit card and redeem all his or her mobile coupons seamlessly with a single tap.

One can then imagine the average ratio for credit cards and coupons on NFC-enabled cell phones in any given year to be easily 1:200. Assuming an overall

50% redemption rate for all coupon campaigns and applying a PPR pricing model, the network carrier is guaranteed incremental revenue from 100 coupons annually per subscriber involved in proximity transactions.

If we assume that coupon issuers agree with a pricing model where the average cost per redeemed coupon is between \$0.25 and \$0.50, the ARPU with coupons will be then \$25-\$50 annually. This is equivalent to a 5x-10x multiple of the ARPU with credit cards. In other words, the network carrier that subsidized 5 million NFC cell phones for an additional upfront cost of \$50 million may anticipate between \$125 million and \$250 million in potential annual revenues with mobile coupons compared to only \$25 million in revenues with credit card provisioning over a 2 to 3-year timeframe. This illustration assumes several coupon campaigns totaling 1 billion mobile coupons issued throughout one year with 500 million being redeemed. Some assumptions may need to be refined, but it remains clear hereafter that mobile coupons hold potential to be far more profitable for carriers than just provisioning credit cards into cell phones. Of course, provisioning other types of cards such as gift cards or tickets may represent additional revenue streams, but yet the ratio may still be low compared to coupons, and most importantly, MNOs will not generate revenues in processing fees as for coupons.

Finally, it is important to note that network carriers will need to partner closely with a reliable and trusted third-party service provider operating a cross-carrier mobile coupon management platform that handles the complex relationships with all various coupon issuers and integrates with participating merchant stores across the country while guaranteeing interoperability and auditability. As a true pioneer with superior technology, Contactless Data is well positioned to be that entity.

## **About the Author**

Ismaila Wane is an entrepreneur and an NFC technology evangelist. He is a co-founder of Contactless Data, a cutting-edge mobile commerce startup specializing in couponing and NFC. Prior to launching the company, Ismaila worked at NXP Semiconductors as a software engineer and a technical leader where he was instrumental in the early development of the mobile initiative for Mifare® technology. Ismaila holds both engineering and information/communication degrees from respectively the University of Arizona (USA) and the University of Nice Sophia-Antipolis (France).

He can be reached by email at [ismaila.wane@contactlessdata.com](mailto:ismaila.wane@contactlessdata.com)

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