

## **The Business Case for Electronic Product Code (EPC) on Coupons**

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Coupons appear to be headed towards the digital medium. Indeed, consumers are becoming increasingly comfortable in finding coupons on their computers or their mobile phones. Nevertheless, processing coupons has not changed a bit since the 1950's when NCH was created as the nation's first dedicated coupon processor. One may even speculate that the coupon in its handling form by the cashier has not drastically changed since 1894. Each year, billions of paper coupons are still being shipped generally to human-labor intensive processing plants in Mexico. With an annual volume of over 300 billion issued and 2.6 billion redeemed, coupons remain unfortunately one of the last antiquated financial instruments yet to embrace the benefits of an electronic infrastructure.

### **What Happened to Food Stamps?**

The US government used to issue billions of paper coupons otherwise known as food stamps. These "coupons' relatives" have gone digital with the introduction of the Electronic Benefit Transfer (EBT) card mitigating primarily the consumer's social stigma issue associated with using food stamps while enhancing efficiency and control in the whole process. Most of government issued coupons are today processed electronically. This migration was facilitated as the government is the single entity issuing food stamps making the logistics simpler in contrast to the thousands of CPG manufacturers that need to issue coupons as part of their constant marketing tactics.

The US government's efforts were also recently portrayed with the National Telecommunications and Information Administration (NTIA) TV coupon initiative where \$40 coupons were issued for electronic redemption at participating stores throughout the nation allowing consumers to buy new digital TV converter boxes. It has been also reported that the point of sale integration at these stores for this initiative proved very straightforward in many instances as it leveraged the existing electronic payment infrastructure used by retailers.

In today's mobile environment, manufacturers may have their much needed EBT-like card in the prevalent mobile phone form factor making also possible to reach in the process the so-called "digital natives" who do not clip paper coupons.

### **Towards Electronic Coupon Processing**

A true digital coupon lifecycle is entirely electronic. In other words, the coupon never appears in paper format from distribution, redemption and clearing. It

should not be captured with cashier's intervention as some solutions offer today. Digital coupon processing would then naturally close the loop of the coupon's lifecycle. The obstacles faced by the industry for making electronic coupon processing a reality were in the past mainly due to the two following reasons:

- Unavailability of digital coupon containers for consumers
- Undocumented manufacturer's and retailer's ROI

The maintenance of the status quo was also favorable to many traditional coupon processors as a paradigm shift would disrupt tremendously the core of their businesses. However, as mobile devices become the de-facto distribution platform for marketers, electronic coupon processing adoption appears simply inevitable.

### **EPC in Supply Chain Management**

Supply chain management is in the process of adopting Electronic Product Code (EPC) with retail giant, Wal-Mart leading this movement. EPC is in fact the backbone of future electronic supply chain management leveraging RFID technology. Although the business case for RFID is still debatable for pundits, operational efficiency and control remain key arguments amongst stakeholders. As products move to EPC, it is thus natural to explore the possibility of digital coupons leapfrogging to EPC by simply bypassing GS1 Databar.

### **Comparing GS1 Databar to EPC**

GS1 Databar has been introduced as the new standard for coupons mandated for wide acceptance by 2010. Its business case has been well documented. GS1 Databar, albeit considered as a significant improvement to previous coupon formats, is still a mere visual barcode built for a paper-based infrastructure. On the other hand, EPC is a pure digital data structure purposely designed for a large-scale efficient electronic infrastructure.

GS1 Databar has been in fact defined as a transition phase before EPC adoption according to the supply chain industry. This linear transition makes the fundamental assumption that products are leading the migration in supply chain technologies. Accidentally perhaps, coupons have migrated at a much faster pace in the electronic chain management with the ubiquity of mobile phones. Leveraging the processing power of these new digital containers, coupons are suddenly much more positioned to embrace the electronic infrastructure as opposed to packaged products.

## **The ROI of Electronic Coupon Processing with EPC**

It is widely agreed that coupons would not need to be sent to Mexico with the advent of electronic coupon processing (*unless, of course, the IT data centers were hosted there!*). With efficiency and control as key drivers, the ROI for manufacturers and retailers may be summarized as below:

### **Manufacturer's ROI:**

- Overall decrease in total coupon campaign costs
- Substantial fraud reduction
- Faster measurable campaign results

### **Retailer's ROI:**

- Quicker financial reimbursement of coupon handling receivables
- Decrease in transaction time at the points of sale
- Increase in top and bottom lines

## **Conclusions**

GS1 Databar may be regarded as a slow transition bridge to EPC, but leapfrogging may be just necessary as digital coupons become mainstream. Indeed, as coupons go digital, why shouldn't their data format?

One may argue that most retailers have been making investments in upgrading their point-of-sale infrastructure to accommodate GS1 Databar and leapfrogging to EPC-based coupons would not represent a good business move now. However, to address that point, it would be important to note that these retailers are also exploring in parallel the potential to include in their future capital expenditures the cost of investing in RFID-like payment infrastructure utilizing NFC technology. Some of them such as CVS/Pharmacy have in fact already deployed contactless readers in all their stores. Parallel investments in NFC technology may thus justify the leapfrog to EPC.

NFC is well positioned to have a catalyst role in the digitization of coupons by providing the electronic transport carrier needed in the consumers' mobile devices to push coupons into the points of sale, closing hence the electronic redemption gap. The fact that EPC can offer a large coding space of over 68 billion unique items per product (or coupon) alongside with the potential to integrate it with future RFID product identifying tags makes it the best available data structure for deploying digital coupons today.