THE TELCO MOBILE COUPON BUSINESS OPPORTUNITY
A framework for M2M based targeted mobile coupon delivery
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Coupons have seen widespread use by OEMs and retailers for over a century. With the advent of the Digital Age, paper based coupons have given way to mobile coupons. Mobile coupons have become a key component of the mobile marketing mix driven by higher redemption rates and faster time-to-market compared to traditional paper coupons.

However, current mobile couponing solutions have a number of shortcomings that limit their effectiveness. Most marketers lack a unified view of a customer’s purchase behavior or coupon redemption history. Coupon distribution, in most cases, is not backed by customer insights and analytics. As a result, the vast majority of coupons are not targeted appropriately, which lowers the impact of a coupon campaign.

This paper proposes a M2M based mobile couponing solution that promises to improve couponing effectiveness. The growing penetration of smart devices in consumer homes provides a wealth of untapped opportunities for couponing. The proposed solution delivers rich consumer insights based on data gathered from M2M enabled devices such as smart home appliances and smart meters. These insights can help marketers create highly targeted offers and uncover significant new cross-sell and up-sell opportunities.

With their ubiquitous networks and wide customer reach, Telcos are distinctively positioned to leverage the M2M based mobile couponing opportunity. The proposed solution enables Telcos to offer a strong value proposition to manufacturers, retailers and consumers and generate additional revenue streams for all.

1. Introduction

Mobile devices are key influencers of purchase decisions and enable spur-of-the-moment shopping. Research indicates that 81% of purchase decisions made using smartphones are spontaneous rather than planned. Consequently, mobile phones offer a critical window of opportunity for coupon distribution, by providing access to consumers at the point of sale when they are most susceptible to making a purchase. Marketers as well as consumers are keen to exploit the promise of digitization and mobility, which has made mobile couponing a burgeoning opportunity.

The potential of mobile couponing extends far beyond the delivery and redemption of coupons via mobile phones. The true potential of mobile couponing lies in the delivery of targeted, relevant, and personalized coupons. Targeted mobile couponing can greatly enhance the effectiveness of coupon distribution. In the subsequent sections, we explore the shortcomings of current mobile couponing solutions and present a M2M based solution for the creation of new value added mobile couponing services.

2. The Mobile Couponing Opportunity

Mobile couponing is gaining traction across the globe. According to estimates from Juniper Research, the market for mobile coupons is expected to grow eightfold from $5.4 billion in 2011 to over $43 billion by 2016. There is strong consumer interest in mobile couponing. The number of mobile coupon users is estimated to exceed 500 million by 2013, representing a 30% annual growth in users. Key drivers of the mobile coupon opportunity are discussed below:

- Growth in Smartphone Penetration. The number of smartphone users crossed the one billion mark during the third quarter of 2012 and is expected to double by 2015. Consumers are increasingly using smartphones as aids to decision making at the point of sale, to search for product information, compare prices, and locate and redeem offers and discounts.
• **Adoption of Mobile Data Services.** The rapid adoption of mobile data services by consumers is driving the growth of mobile marketing. According to a 2011 survey by digital marketing firm Unica, over 40% of European and American marketers use mobile marketing, mainly through mobile apps, mobile websites and mobile messaging. The potential for mobile marketing including mobile couponing is enormous. In the US alone, with over 300 million mobile subscribers, more than half of the mobile subscriber base accesses mobile internet; over 6 billion text messages are sent every day and close to 50% of the total mobile audience uses apps.

• **Higher Redemption Rates.** The convenience offered by mobile coupons drives higher redemption rates. Mobile coupon redemption rates are expected to exceed 8% by 2016, an eightfold increase compared to paper based coupon campaigns. This has led to increased marketer interest in mobile coupons.

• **Faster Time-to-Market.** Mobile coupons offer a faster time-to-market compared to traditional paper coupons that involve long cycle times for design, print and distribution.

### 3. Limitations of Current Mobile Couponing Solutions

Current solutions fall short of delivering the full benefit of mobile couponing due to the following reasons:

• **Non-Targeted Distribution:** Mobile coupons today are largely non-personalized. Consumers often find themselves inundated with coupons that are unrelated to their requirements or preferences. This can potentially lead to customer discontent and eventually to customer indifference towards the brand or store. A one-size-fits-all approach not only undermines the effectiveness of mobile coupons but can also alienate customers and damage brand equity. This is especially critical given that the primary demographic for digital coupons consists of younger consumers who are more demanding of a personalized experience and more likely to be alienated by indiscriminate and unsolicited coupon distribution. Marketers of low-involvement goods such as groceries need to be especially mindful of non-targeted couponing as customers tend to switch loyalties more easily for such product categories.

• **Absence of Dynamic Updates:** Current couponing mechanisms do not allow for modification of a coupon once it is delivered to a consumer’s mobile phone. Once delivered, the coupon resides outside the issuer’s reach and control. In order to update or modify a coupon, the coupon issuer is forced to issue an alternate coupon, which may confuse customers.

• **Poor Tracking and Control:** Traditional mobile coupons are difficult to track due to the absence of a centralized repository of a customer’s coupon ownership and redemption data. As a result, coupon issuers lack real-time visibility into patterns in consumer behavior, which impedes their ability to tailor offers based on a customer’s redemption characteristics.

• **Need for Local Storage:** Traditional mobile coupons are required to be stored locally on the customer’s mobile phone until redemption. The customer stands to lose the offer if the coupon is deleted from the mobile memory before redemption.

### 4. A M2M Based Mobile Couponing Solution

The limitations of existing mobile couponing systems point to the need for an alternate solution that can make couponing more effective for consumers and marketers alike. In this section, we present a mobile couponing solution that aims to leverage the power of M2M for highly targeted, personalized couponing.

#### 4.1. Solution Approach

We live in a Digital World where consumers often have a range of connected devices in their home such as smart appliances and smart utility meters. Globally, the number of connected home devices will grow dramatically in the near term future. Analysis of data generated by these devices can reveal rich insights on customer requirements, interests and preferences.

An optimal mobile couponing solution will embrace a pull-based approach in contrast to the current push-based approach used by marketers today. Under the pull-based approach, customers will provide their explicit consent to receive coupons and will be at liberty to choose coupons that best meet their preferences. This contrasts with the traditional push-based mode of coupon distribution where marketers target consumers indiscriminately, without their consent.

The solution comprises the following building blocks, as illustrated in Figure 1:

1. **M2M Platform:** The M2M platform aggregates data from connected household devices. Monitoring device data provides marketers with valuable insights on developing offers of interest to customers. For example, a growing number of washing machines today offer a “baby care” setting for infant clothing. Data gathered by the M2M platform from a connected washing machine may reveal frequent laundry cycles for infant clothing. A coupon for special laundry detergents for infant clothing can be generated based on information gathered from the washing machine.

2. **Customer Analytics Engine:** The customer analytics engine analyzes device data gathered by the M2M platform and generates insights on customer preferences. Device data is matched with coupons provided by marketers and customer preference data received from customers and the best offer is computed for a customer.

3. **Cloud-Based Customer Profile:** The cloud-based customer profile acts as a centralized repository of all coupon ownership and redemption data for a customer. The profile is created by the Telco with the customer’s consent. Coupons are uploaded to the profile based on insights from device usage analytics. The profile offers multiple search mechanisms to help customers locate coupons based on parameters such as brand, product category and store name. Customers download coupons from their profiles based on their requirements at the point of sale. Once redeemed, a coupon is deactivated and is no longer available for download from the profile. The cloud-based customer profile provides marketers with visibility into a customer’s coupon usage patterns, which enables them to tailor offers better.

Wipro recommends that Telcos adopt a phased approach towards implementing this solution. In the first phase, Telcos should create cloud-
based customer profiles and enable the delivery of mobile coupons to the profiles. This phase will streamline the coupon delivery and redemption process for marketers. In the second phase, Telcos should develop the M2M platform and the customer analytics engine to enable targeted coupon distribution.

The two phases are described in further detail below:

**Phase 1: Mobile Coupon Delivery via Cloud-based Customer Profile**
- Customer registers for profile creation with Telco
- Customer selects preference for mobile coupon categories (e.g., grocery, apparel, cinema)
- Telco creates customer’s cloud-based profile tagged to customer’s mobile phone number
- Telco maps coupons received from marketers against customer preference data and uploads relevant coupons on customer profile
- Customer downloads coupon of interest from cloud based on requirement
- Coupon is redeemed at POS
- Redeemed coupon is deactivated from customer profile

Figure 2 illustrates the steps involved in phase 1.

![Figure 2: Mobile Coupon Delivery via Cloud-based Customer Profile](source: Wipro Technologies)

**Figure 1: M2M based Mobile Couponing – Solution Framework Source: Wipro Technologies**
**Phase 2: Coupon Delivery based on Device Usage Characteristics**

- Customer registers home appliances with Telco’s M2M platform
- Customer selects preference for mobile coupon categories (ex: grocery, apparel, cinema)
- Appliance usage data is gathered via Telco’s centralized M2M platform
- Appliance data is analyzed using customer analytics engine and matched with campaign information provided by marketer and preference data provided by customer
- Coupon is generated and uploaded to the customer’s profile
- Customer downloads coupon of interest from cloud based on requirement
- Coupon is redeemed at POS
- Redeemed coupon is deactivated from customer’s profile
- Telco maintains confidentiality of customer data and does not sell customer data to OEMs or retailers

Figure 3 illustrates the steps involved in phase 2.

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**Figure 3:** Coupon Delivery based on Device Usage Characteristics

*Source: Wipro Technologies*
4.2. Solution Benefits

**Targeted Distribution:** The proposed solution provides marketers with clear insights into coupon redemption behavior and device usage characteristics. This aids in customer segmentation, and allows marketers to deliver highly targeted coupons. As a result, coupon efficacy is increased. The solution can also be integrated with mobile presence solutions for the integration of location aware capabilities.

**Improved Tracking and Control:** The cloud based customer profile provides marketers with a unified view of a customer’s coupon redemption history and enables them to better track coupon status from delivery to redemption. This helps marketers gauge the effectiveness of a campaign. The solution also enables marketers to view the types of coupons that best meet a customer’s requirements based on the redemption pattern, which helps them to modify offerings for future promotions.

**Increased Cross-Sell and Up-Sell Opportunities:** Tracking device usage data also provides marketers with increased cross-sell and up-sell opportunities. For example, monitoring a customer’s microwave oven usage pattern may reveal high consumption levels for dairy, poultry, meat and fish. The retailer may use this information to cross-sell various grocery products that could be useful to the customer.

**Dynamic Offers and Promotions:** The proposed solution provides marketers with the flexibility to dynamically modify coupons. Unlike traditional mobile coupons that are locally stored on the customer’s mobile device and hence cannot be updated or modified once delivered, M2M based mobile coupons can be dynamically updated. Since M2M based mobile coupons reside on the cloud, they can be continuously modified even after they have been uploaded on the customer’s cloud-based profile.

**Cloud Storage:** The proposed cloud based solution eliminates the need for coupons to be stored locally on the customer’s mobile device, freeing up mobile memory for personal content.

**Enhanced Customer Satisfaction:** The proposed solution promises to substantially enhance customer satisfaction by delivering coupons that are aligned to customer requirements and preferences. The solution provides multiple search mechanisms that make the process of locating coupons easier and more effective for customers. The solution offers customers control over the types of coupons they receive and eliminates spam. Finally, the solution provides customers with the convenience of maintaining and tracking coupons centrally.

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### Comparison of Traditional Mobile Coupons versus M2M based Mobile Coupons

<table>
<thead>
<tr>
<th>Feature</th>
<th>Traditional Mobile Coupons</th>
<th>M2M based Mobile Coupons</th>
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</thead>
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<tr>
<td>Personalization</td>
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</tr>
<tr>
<td>Centralized Tracking and Control</td>
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*Figure 4: Solution Benefits Comparison Source: Wipro Technologies*
In summary, the proposed M2M based mobile couponing solution offers benefits to members across the couponing value chain, as captured in Figure 5.

5. Conclusion

Mobile coupons are a key component of the mobile marketer’s toolkit. However, while the potential for mobile couponing is enormous, current couponing solutions have neither fully explored nor exploited this potential. The key to the creation of an effective couponing campaign is personalization. The connected consumer in today’s Digital World demands personalization and couponing must accordingly evolve from a one-size-fits-all model to a highly targeted model.

M2M based mobile couponing provides avenues for personalization beyond those offered by conventional mobile coupons and text message promotions. M2M enabled consumer devices such as smart home appliances generate a wealth of data that can provide valuable insights to marketers. Highly targeted coupons can be generated based on these insights.

The proposed M2M based mobile couponing solution promises to create new business opportunities for marketers and Telcos and deliver greater value to customers. Wipro believes that with a unique combination of technology, infrastructure and customer reach, Telcos are uniquely positioned to harness the power of M2M to transform mobile couponing.
References / Citations

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