

# Abstract

A digital offer, such as a coupon, voucher, reward, or loyalty card, is designed to enhance the merchant/customer relationship. The use cases outlined here are provided in order to make progress toward making it easier and more secure for all actors in the digital offers ecosystem to manage, distribute, use, and settle digital offers via the Web in a more standardized and interoperable fashion. The use cases in this document focus on concrete scenarios that the technology defined by the group should address.

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# Introduction

A digital offer, such as a coupon, voucher, reward, or loyalty card, is designed to enhance the merchant/customer relationship. The use cases outlined here are provided in order to make progress toward making it easier and more secure for all actors in the digital offers ecosystem to manage, distribute, use, and settle digital offers via the Web in a more standardized and interoperable fashion. The use cases in this document focus on concrete scenarios that the technology defined by the group should address.

The W3C Digital Offers Community Group at the W3C is investigating the use cases and requirements around digital offers. The goal of the Community Group is to determine if there is a sufficient understanding and need to merit the creation of a W3C Working Group to develop Recommendations in this space.

## Importance of this Work

[EXPLAIN WHY THIS WORK IS IMPORTANT]

## Use Case Model

This document presents an aggregate use case model, comprised of Needs, Roles, Tasks, Sequences, and Interactions. Taken together, these models define the use cases that the Digital Offers Community Group will address.

Needs define the problem space that Digital Offers address. Roles specify the roles different entities play when interacting with Blockchains. Tasks define the functions users can accomplish and sequences demonstrate how tasks might be realized by interactions between entities over time.

As with all models, this use case model is neither exhaustive nor complete. The listed uses cannot exhaustively capture all possible use cases. Similarly, the models do not completely characterize the use cases represented. However, the combined model provides specific, coherent guidance for the work ahead.

## Roles

There are three roles supported by the digital offers ecosystem: Customer, Merchant, Vendor.

## Customer

The entity that uses digital offers at a Merchant location.

## Merchant

The entity that interacts directly with the customer and their digital offers.

## Vendor

The entity that distributes digital offers and processes redemptions for those digital offers.

## Needs

Digital Offers address Needs in a number of key domains:

### Consumer Packaged Goods

???

### Brick and Mortar Retail

???

### Online Retail

???

### Digital Marketing

???

# Tasks

Use cases are often used as a driver for requirements. While the users of digital offer have needs across many domains, the tasks associated with those needs span the domains. This section summarizes those tasks, as well as requirements related to the tasks, and maps the tasks and requirements back to the associated needs.

## Management and Distribution

Management and distribution handles how coupons are managed by Vendors and Merchants and made available to Customers.

### Issue Coupon or Loyalty Card

- Distribution to Mobile Devices without App Installation
- Controls on Distribution
- Distribution via email
- Distribution via merchant website
- Distribution at point of purchase
- Distribution via manufacturer website
- Individualized Coupon Issuance
- 'One per Customer' Discount Code Issuance
- 'One per Customer' QRCode Issuance
- Restriction of offer based on age restricted product
- Restriction of offer based on customer segment/expired coupon

### Store Coupon or Loyalty Card

- Easy Digital Offer Storage and Redemption
- Mobile Wallet Use

### Track Reach, Resonance, and Reaction

- Digital Offer Tracking
- Coupon tracking

## Redemption

Redemption handles how Customers clip, store, review, and redeem digital offers (or pair an offer with a buy action) during a transaction.

## Use Coupon or Loyalty Card

- Interoperable Clip and Save
- Redemption of Offers Received "Out of App"
- Streamlined Redemption during Standardized Checkout
- Redemption of offer received from Merchant website
- Third Party Coupon Use
- Redemption of offer received on social media
- Redemption of offer received as SMS message

## Multi-tender Payment

- Multi-tender Payments - Combining Coupons and Money
- Online multi-tender
- Instore multi-tender

## Restrict Redemption

- Controls on Redemption
- Restriction of offer based on payment method selection
- Restriction of offer based on previous use

## Settlement

Settlement handles how merchants and coupon distributors track redemptions and reimbursements.

## Settle Coupon

- Decentralized Lookup
- Ability to Distinguish Funding Sources

## Near Real-Time Funding

- Near Real-Time Funding
- Immediate merchant coupon reimbursement in sale

## User Sequences

The transaction examples in this section describe basic ways in which digital offer might be used. They are not meant to be architecturally constraining. Instead, they are meant to help illustrate the basic way it be done in a typical interaction. Again - please remember that it is just an example, and should not be thought of as the canonical way such an digital offer environment must be implemented.

# Interaction Models

Interaction models describe a complete story where only part of the story is applicable to the Tasks or User Sequences in this document. They help paint a picture of the sort of environment that digital offer will operate within.