

Web-based “Digital Wallets”

Combining payments, customer loyalty, and digital offers

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Member - Web Payments WG, Digital Offers CG, Verifiable Claims TF

A person wearing a grey hoodie is sitting at a dark wooden table in a coffee shop. They are holding a black smartphone with both hands, looking at the screen. On the table in front of them is a copy of 'UPPERCASE MAGAZINE'. The magazine cover is white with a black circular logo containing a white 'U' on the left. The text on the cover includes 'UPPERCASE', 'a magazine for the creative and curious', and a large graphic of a coffee leaf. The spine of the magazine is orange with a repeating pattern and the text 'UPPERCASE MAGAZINE', '20', and a small 'U' logo. To the right of the magazine is a white coffee cup on a wooden tray, with a spoon resting on the tray. The background is slightly blurred, showing the person's torso and the wooden table.

Coffee Shop Scenario

General Retailer Scenario

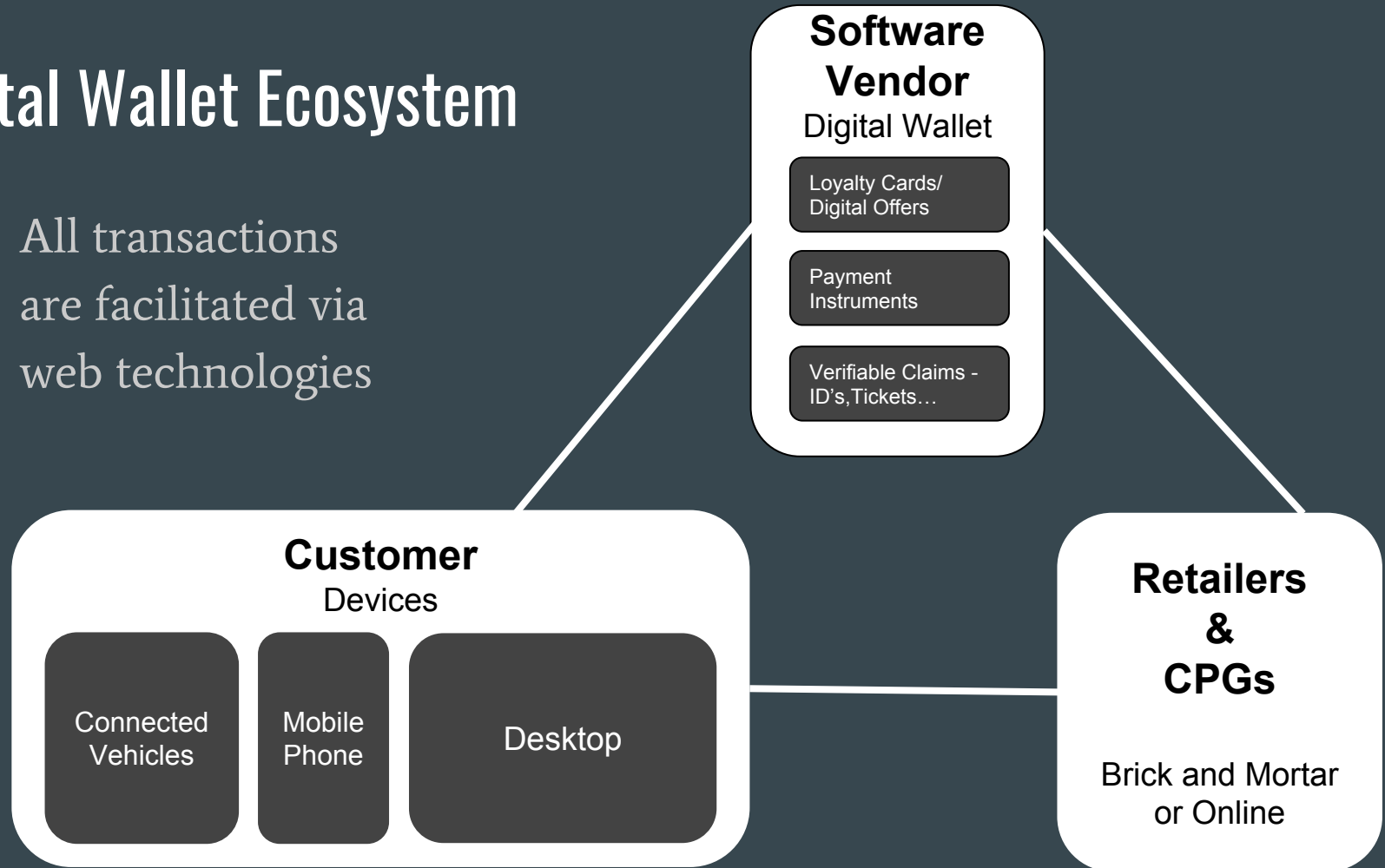
- Retailer provides digital loyalty card to customer
- Retailer delivers digital offer to customer via digital loyalty card
- Customer acts directly on the digital offer to perform a purchase

Problems for Stakeholders

- **Customers**
 - “Am I getting good value?”, retail spam¹, app fatigue^{2,3}
- **Retailers**
 - loyalty programs are limited and expensive^{4,5}, POS integration difficult⁶, vendor lock-in⁶, app barrier^{2,3}
- **Consumer Packaged Goods Companies**
 - anemic digital offer strategy^{7,8}, not widely redeemable²
- **Software Vendors**
 - app fatigue^{2,3}, siloed market with high integration costs^{6,9}

Digital Wallet Ecosystem

All transactions
are facilitated via
web technologies



A person with a beard is seen from the side, wearing a grey sweater, using a tablet computer. The tablet screen displays a website with a video player and text. The person is sitting at a light-colored wooden table. To the right of the tablet is a white cup of black coffee on a matching saucer. In the background, there are some papers and a small wooden box on the table. The word "Customers" is overlaid in white text on a dark horizontal band across the middle of the image.

Customers

Customer

- **Incentives:**
 - want good value, ease of use, and choice of wallet¹⁰, without app fatigue^{2,3}
- **Benefits:**
 - digital wallet available across all devices
 - integrated payments, digital offers, and verifiable claims
 - can easily choose and change digital wallet provider
 - accepted by large number of retailers



Retailers

Retailer

- **Incentives:**
 - strong loyalty competition from larger retailers¹¹
 - customer loyalty increases size and repetition of purchases¹²
- **Benefits:**
 - keeping an existing customer is 7 times less expensive than acquiring a new one.¹²
 - new payment channel - payments initiated via digital offer
 - no vendor lock-in⁶

Consumer Packaged Goods



Consumer Packaged Goods Companies

- **Incentives:**
 - wants better reach, resonance, and reaction
- **Benefits:**
 - real time tracking of when and where digital offers are redeemed
 - can produce individualized digital offers
 - increases reach to consumers via the Web
 - reduces lifecycle management costs



Software Vendors

Software Vendors

- **Incentives:**
 - a level playing field enabling them to provide competing products
- **Benefits:**
 - larger customer base for software and services
 - ability to compete with existing vendors

Demand for Ecosystem

- 315 billion coupons issued, \$515B USD of coupon value^{12, 13}
- Only 2.5% of coupons are digital, 51% of consumers want all coupons to be digital, and 55% would use more of they were¹⁴
- 3.3 billion loyalty memberships, 29 cards/household¹⁵

Why W3C

- W3C is involved in developing the following initiatives:
 - Web Payments
 - Verifiable Claims
 - Digital Offers
- These initiatives include the technology necessary to execute on this "Web-based Digital Wallet" use case
- No plan for cross-collaboration.
- Web Payments IG ensures proper coordination of these activities.

Thoughts?

Questions?

Concerns?

Work Happening Elsewhere

- GS1 - [Digital Coupon Management](#)
- GSMA - [NFC.15 Mobile Commerce, Loyalty Acceptance](#)
- NACS/Conexxus - [Mobile Payments Standard, v2.0](#)
- IFSF - [Loyalty Engine](#)
- IETF - RFC-4153 - [Generic Voucher Language](#)