



US Payment Handbook

All Figures

A separate, full-size visual companion to the Third Edition

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FIGURE 01

The Four-Party Model Plus the Network

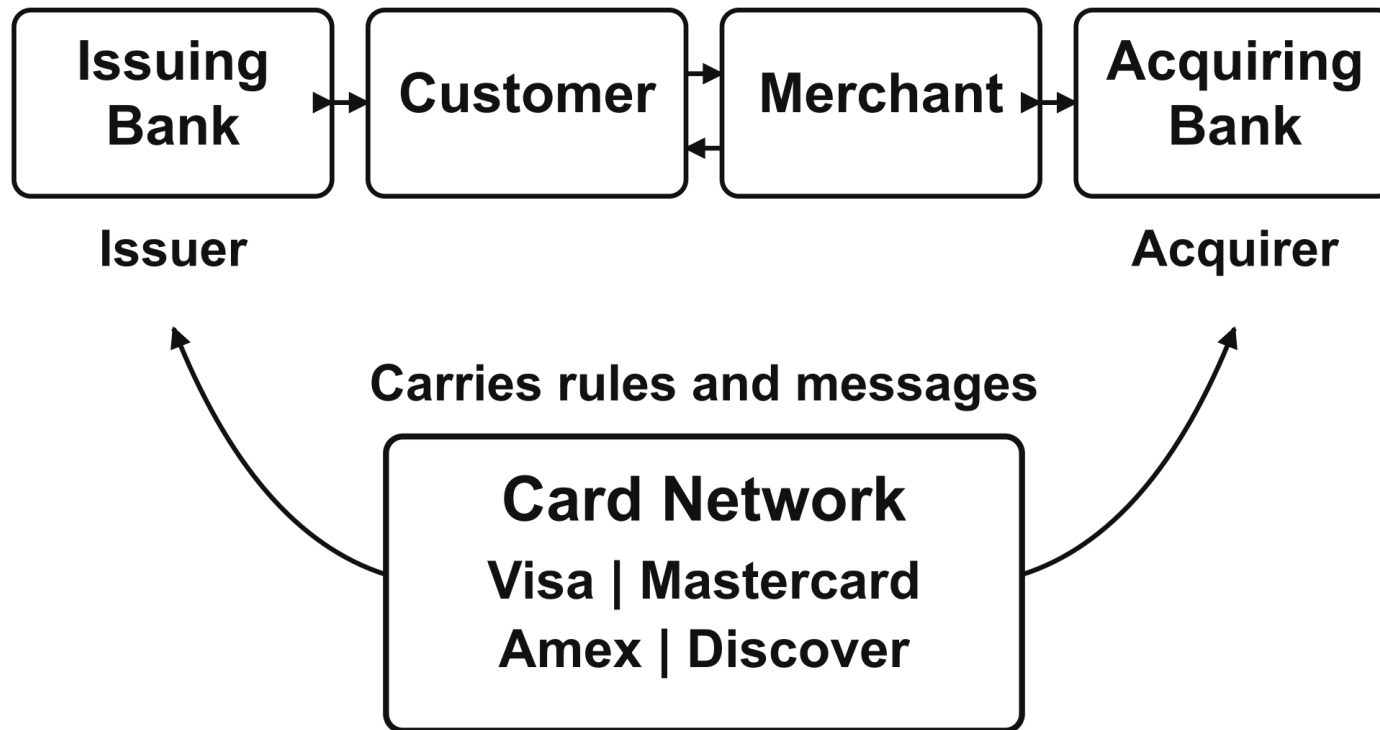
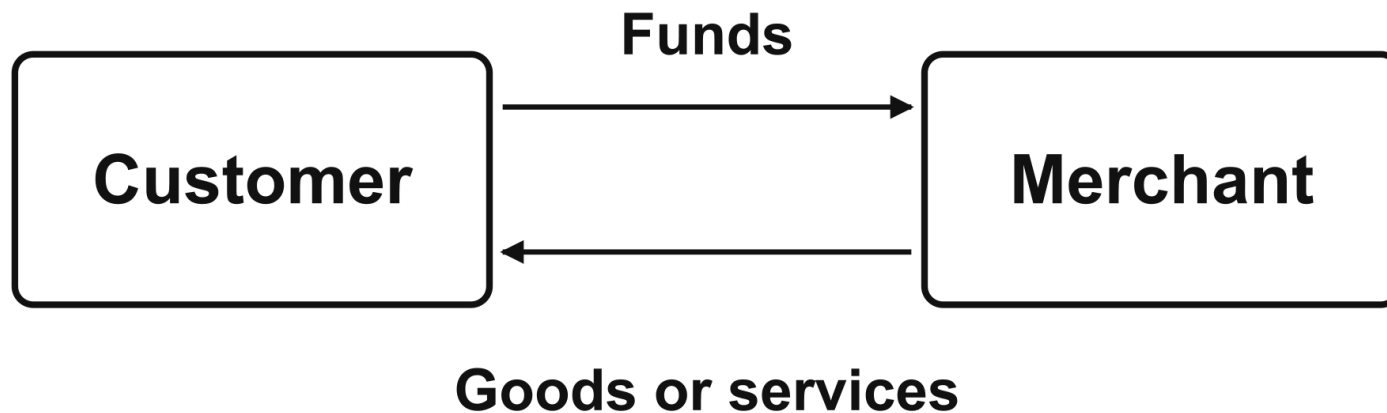


Figure 1. The four-party model plus the network: two banks keeping a promise for a customer and a merchant.

The Stranger Problem

Two Strangers, One Exchange



Neither side has a reason to trust the other.

Figure 2. The stranger problem: goods one way, funds the other, and no reason to trust.

FIGURE 03

The Authorization Round Trip

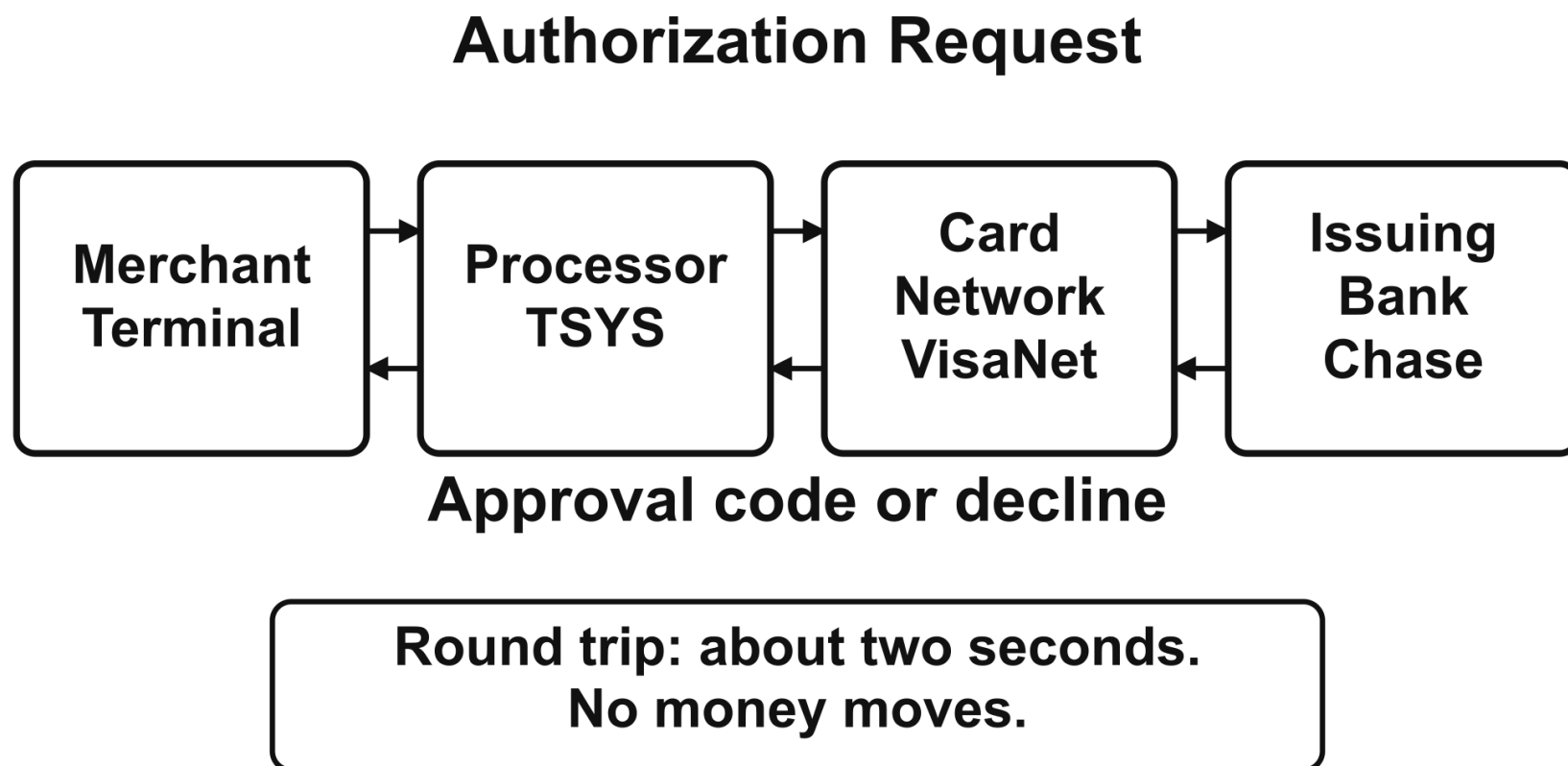


Figure 3. The authorization round trip: about two seconds, and no money has moved.

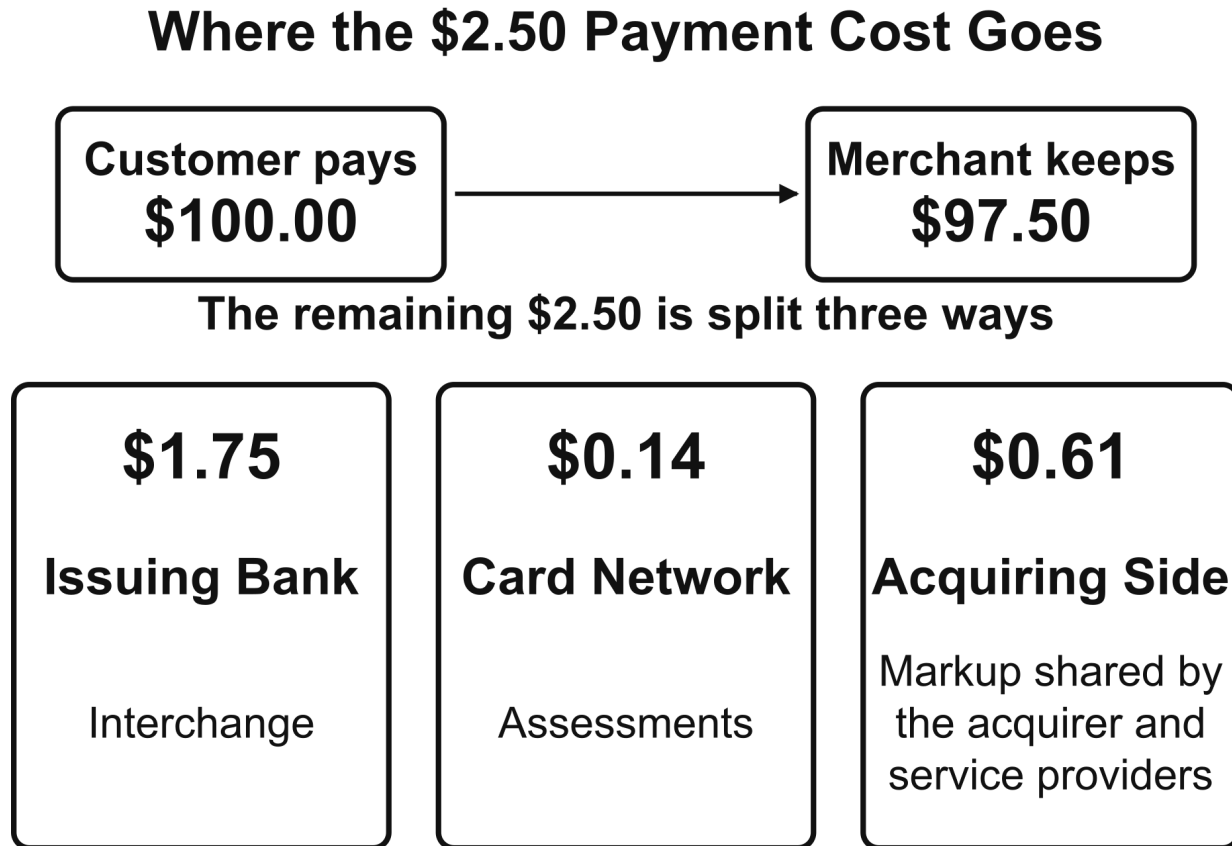
From Authorization to Funding

Three Separate Phases



Figure 4. The three phases of a card payment: the promise, the tally, and the transfer of value.

Where the Payment Cost Goes



*Figure 5. Illustrative breakdown of a \$100 card purchase.
Actual fees vary.*

FIGURE 06

Void, Refund, and Chargeback

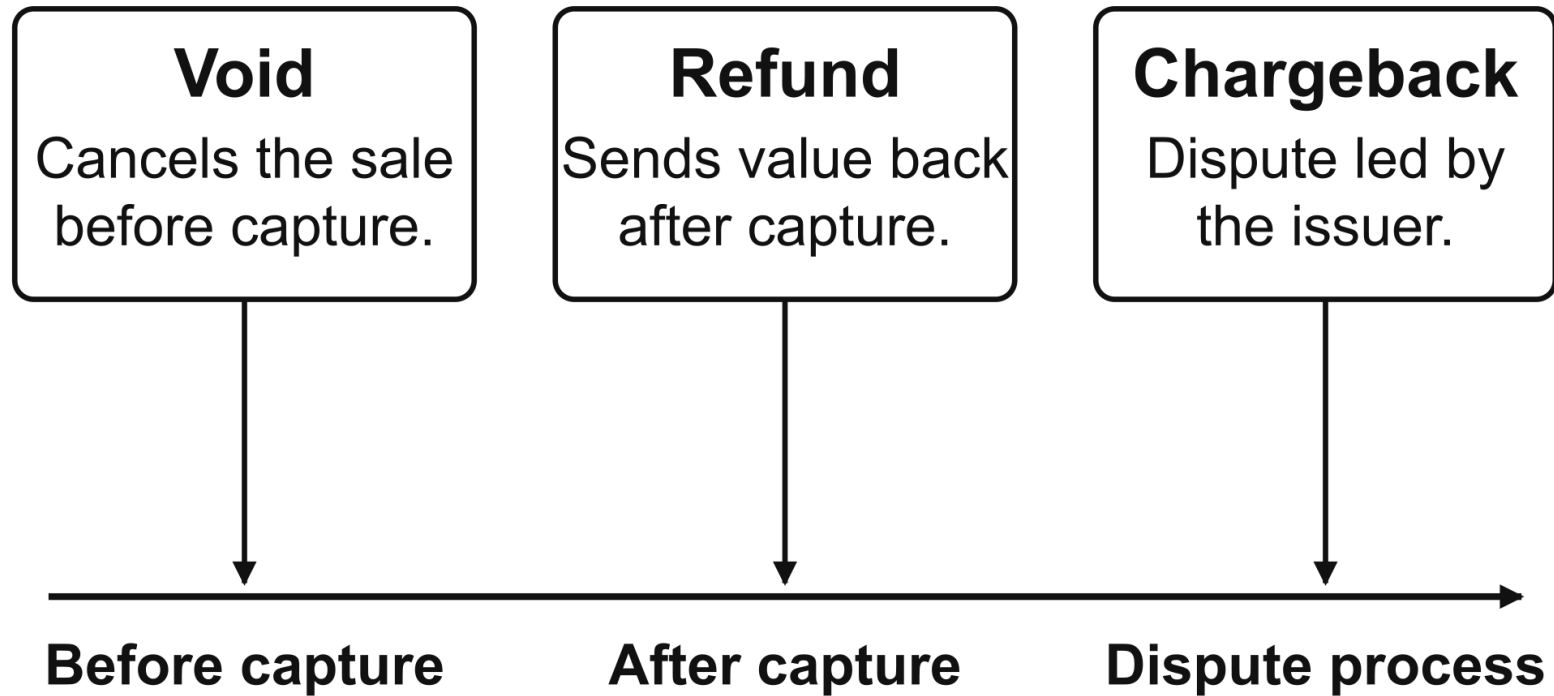
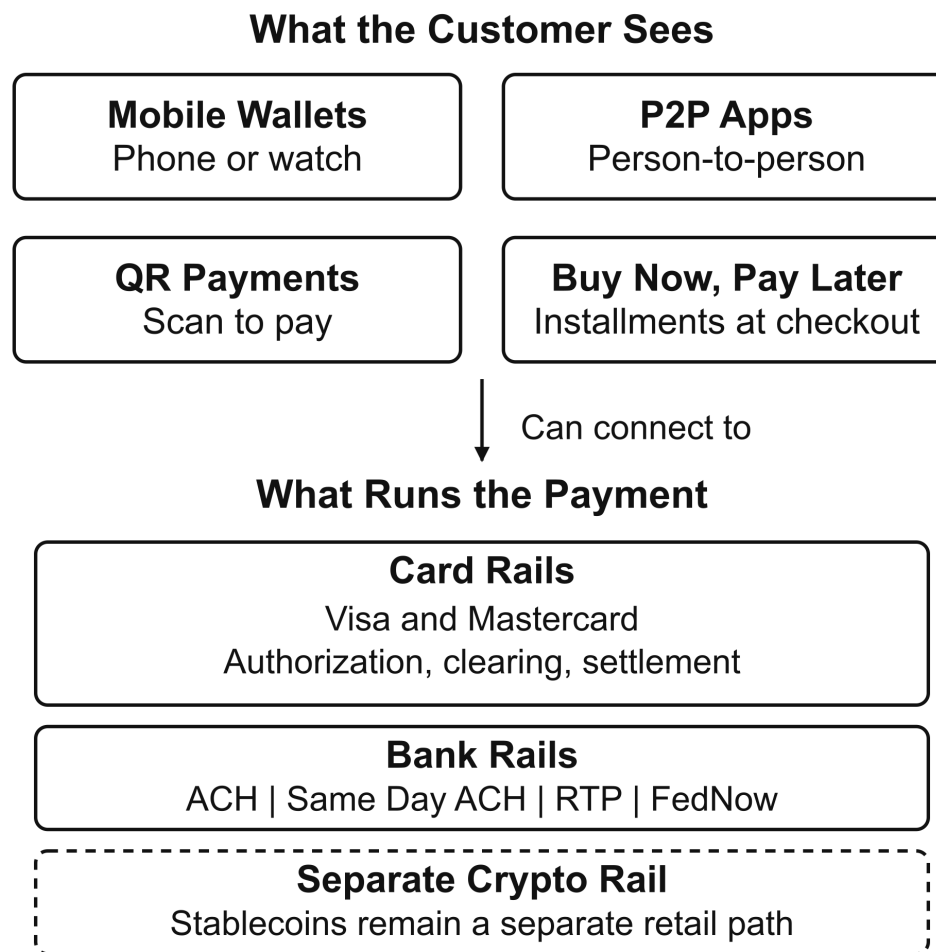


Figure 6. The undo spectrum: void before capture, refund after capture, and chargeback through a dispute.

FIGURE 07

New Front Doors, Same House



*Figure 7. New front doors, same house:
modern payment experiences and the rails beneath them.*

FIGURE 08

Four U.S. Bank Payment Services

Standard ACH Operator: FedACH and EPN under Nacha rules Speed: Later-day settlement Schedule: Batch windows on business days Recovery: Returns allowed in set windows	Same Day ACH Operator: FedACH and EPN under Nacha rules Speed: Hours Schedule: Same-day windows on business days Recovery: Returns allowed in set windows
RTP (2017) Operator: The Clearing House Speed: Seconds Schedule: 24 hours a day, every day Recovery: Interbank finality with return procedures	FedNow (2023) Operator: Federal Reserve Banks Speed: Seconds Schedule: 24 hours a day, every day Recovery: Interbank finality with return procedures

*Figure 8. Four U.S. bank payment services compared.
Rules and features vary.*

Standard ACH, Same Day ACH, RTP, and FedNow differ in operator, speed, schedule, and recovery procedures.

FIGURE 09

An Agent-Led Purchase

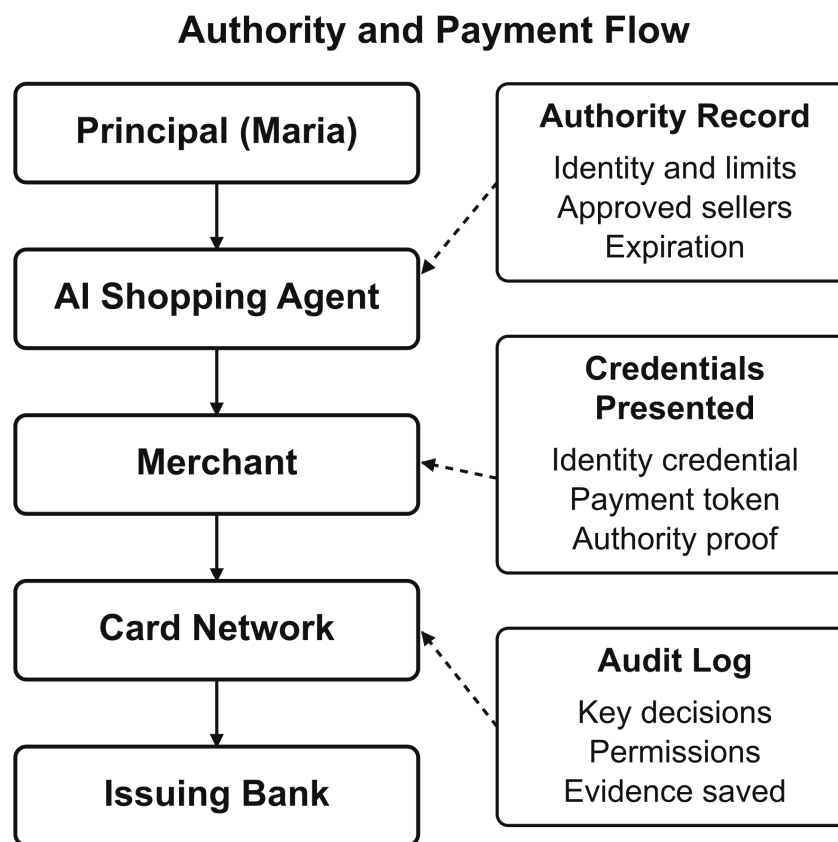


Figure 9. An agent-led purchase: authority in, an audit trail out, and card authorization in the middle.