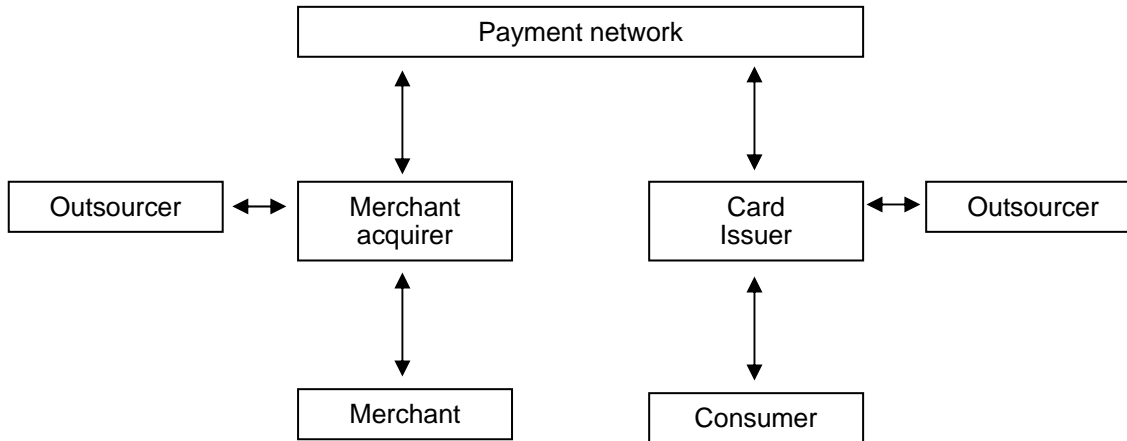


Representative Payment Industry Competitive Landscape

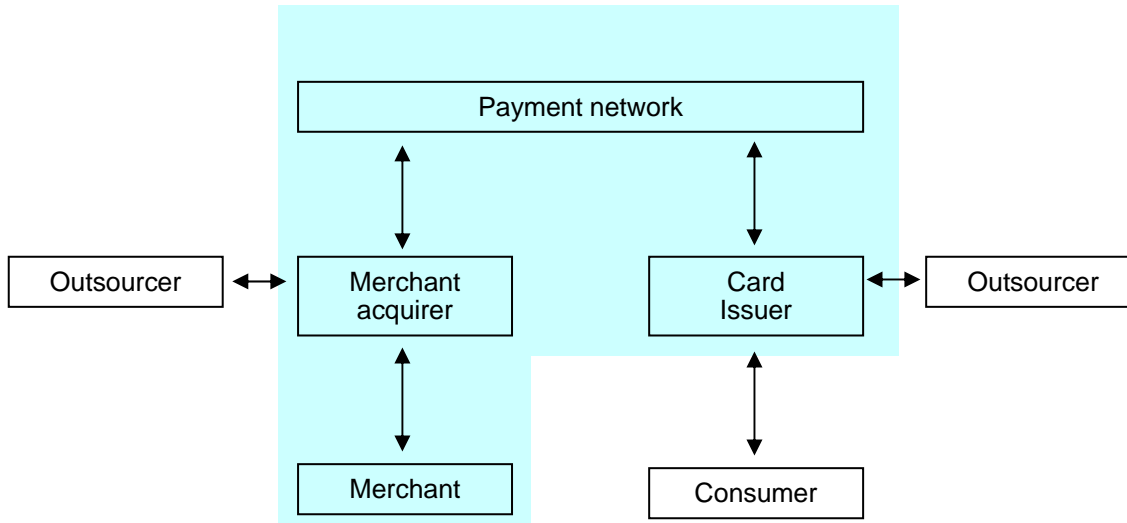


Source: Morgan Stanley Research

Payments Players

- The card issuer (a bank) issues a charge or credit card to the consumer
- The payment network routes, authorizes, and settles the transaction
- The merchant acquirer (also a bank) maintains the payment account for the merchant
- Outsourcers provide various processing services to card issuing and merchant acquiring banks

Merchant integration strategies

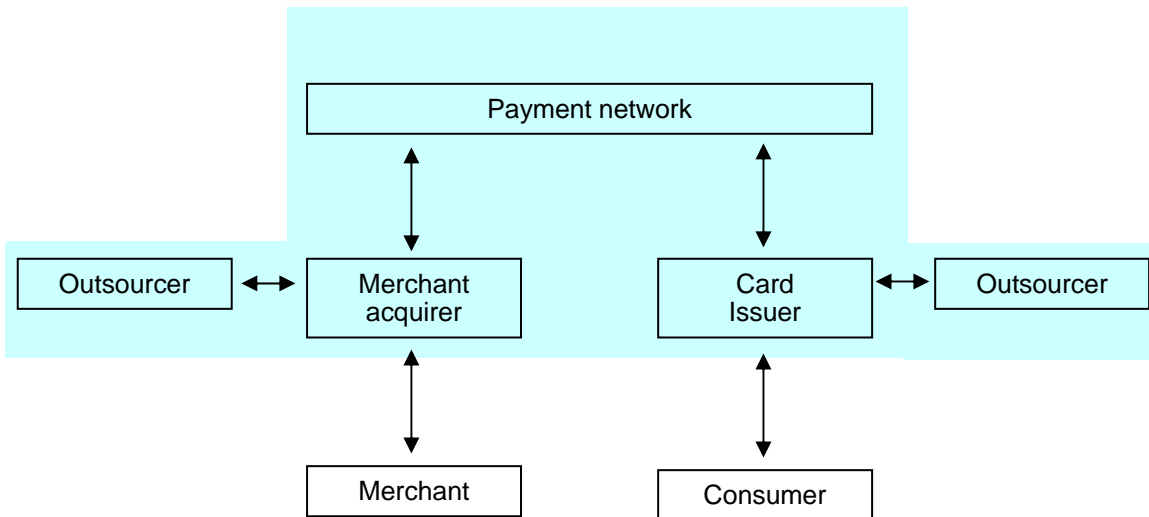


Source: Morgan Stanley Research

Vertical integration

- Merchant may wish to acquire industrial loan bank (ILB) charter, in order to take on merchant acquisition function
- Merchant with ILB charter may also be able to issue its own cards
- Some have hypothesized about merchant interest in controlling a payment network

Issuer integration strategies

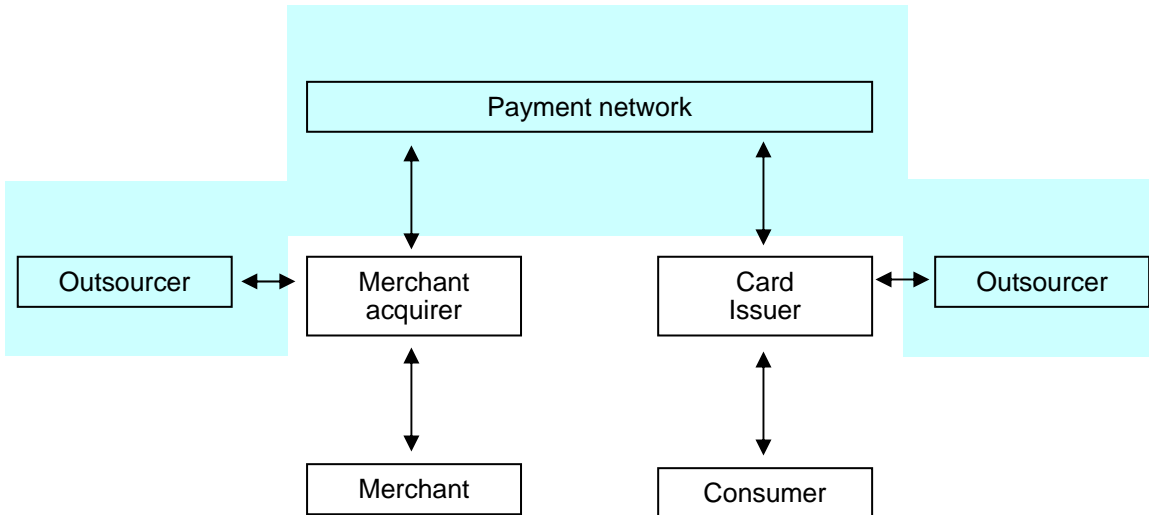


Source: Morgan Stanley Research

Vertical integration

- Several banks own both issuing and acquiring subsidiaries
- Some issuers outsource processing functions, some maintain in-house
- “Closed-loop” operators (American Express, Discover) control proprietary networks and issuing and acquiring functions

Outsourcer/network integration strategies



Source: Morgan Stanley Research

Vertical integration

- Some outsourcers handle both card issuer and merchant acquirer tasks
- First Data Net attempted to link card issuers and merchants without crossing the established payment networks
- Payment networks may offer consulting, processing, or outsourcing-type services to issuers or acquirers in addition to routing transactions