Credit Card Industry

Credit Card Processing - A 10 Year History

"Meat Slicer or Knuckle Buster", Paper Records, Card Present

"Terminal Device", Paper Records, Card Present

"Software Only", Electronic Records, Non-Card Present

"Distributed Software", Encrypted Records, Non-Card Present

The World Of Credit Cards

PAYMENT NETWORK

MERCHANT ACQUIRERS

ACQUIRING PROCESSOR

INDEPENDENT SALES ORGANIZATION

CREDIT CARD ASSOCIATIONS

**CREDIT CARD PROCESSORS**

MEMBER FINANCIAL INSTITUTIONS

MERCHANT BANK
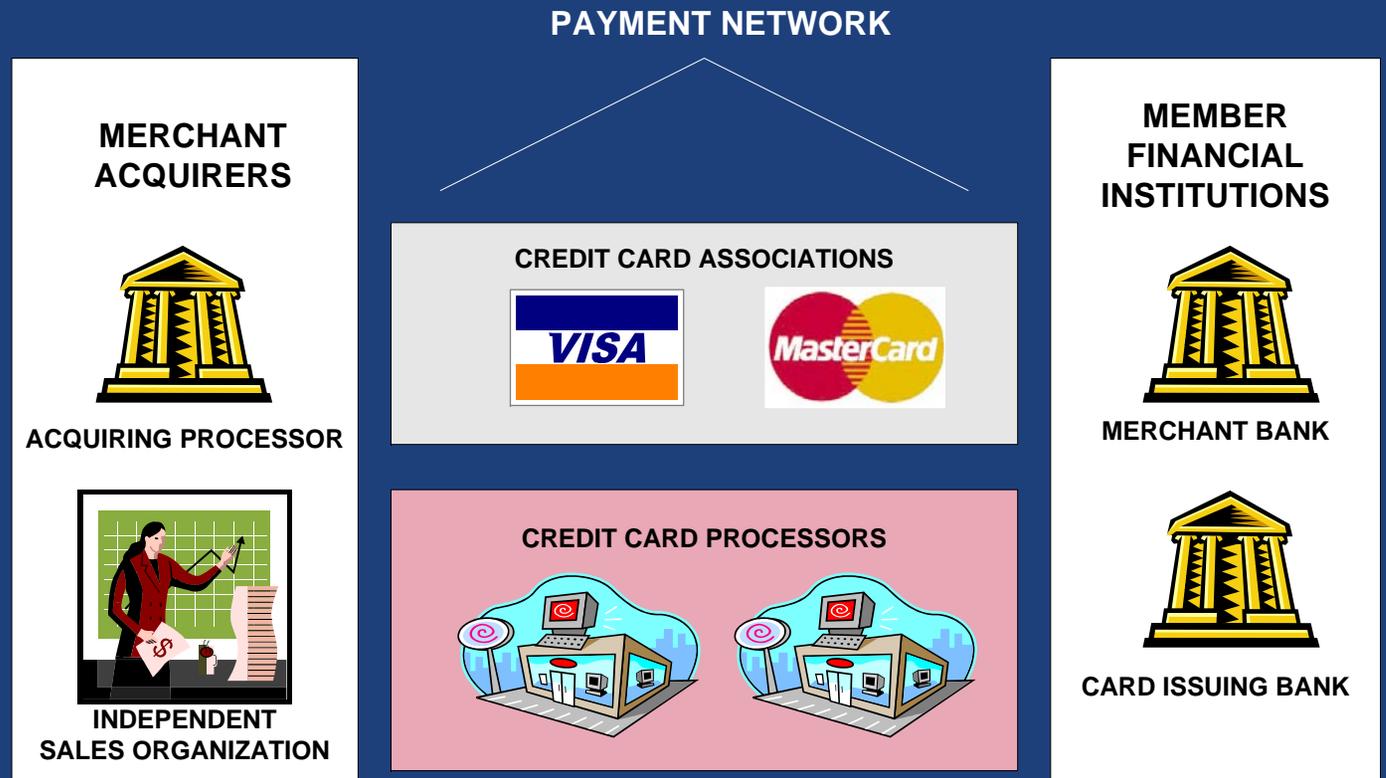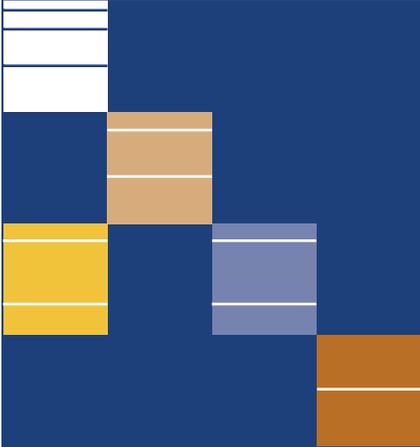
CARD ISSUING BANK

Credit Card Terminology

Association - VISA or MasterCard; organizations which govern credit card transactions including establishment of fee structure for various type of transactions

Cardholder - party using credit card

Issuing Bank - issues credit card, sets credit limit, maintains account and provides monthly statement

Merchant - company processing credit cards

Merchant Bank - where merchant has a deposit account and has contract for credit card services; usually the entity which sells credit card services to merchants; although usually does not perform any processing services

Acquiring Financial Institution – processing and transfer of settlement funds between the Issuing Bank and the Merchant (ex US Bank)
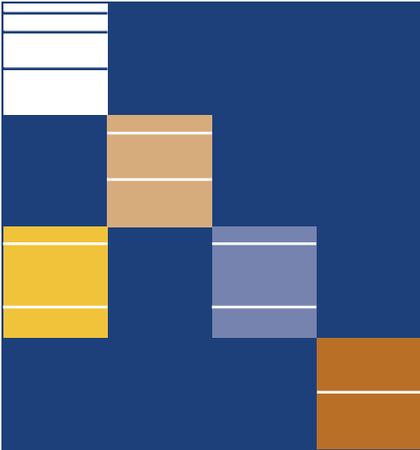
Credit Card Terminology

ISO – Independent Sales Organization Sells and signs-up merchants on behalf of Merchant Banks and processors.

Transaction - sale, purchase or transfer of money made using a plastic card. Two types: Offline (paper imprint of card) and Online (passed by electronic communication from Merchant to Processor)

Authorization - request by merchant to verify cardholder credit and reserve amount of transaction (also pre-authorization)

Settlement - merchant request for payment made to acquirer once goods or services are delivered

Interchange Fee - Fee assessed to a Merchant for a transaction; determined by rules established by Association

Surcharge - A series of fees charged to merchants for transactions based on Merchants compliance with certain procedures. Especially impacts "Card Not Present" Merchants. (Example is Surcharge when Address Verification not performed). Surcharges are paid by Merchant to VISA or MasterCard
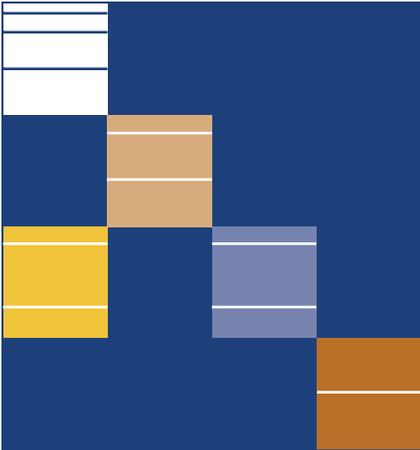
Credit Card Terminology

Host Mode - (host capture) acquirer maintains transaction detail, usually for retail sales, settles the same day automatically

Terminal Mode - (terminal capture) merchant maintains transaction detail, usually for mail/phone orders, settles only after shipment, amount may change

Card Present - transactions where credit card is present such as with retail, and restaurant industries

Card Not Present - transactions where credit card is not present such as with Mail Order, Internet, Government, Education, Order forms, Reservation and Travel industries

Collectively referred to as "Processor" in this presentation (ex Paymentech):

-**Authorization Network** provides dial or dedicated communications network, processes authorizations with issuing banks and settlements with acquirer

-**Acquiring Processor** – process settlements, collect funds from -issuing banks, deposits into merchant account, billing services, reporting services, customer service. Settlement services done on behalf of Acquiring Financial Institution

("Processors" also sometimes referred to as "Clearinghouses" or "Service Providers" or "Processing Networks")

Transaction Process

MERCHANTS

Mail Order Telephone Order
MOTO (Non-card Present)

Retail Applications
Card Swipe (Card Present)

Web Based Applications
B2C & B2B (Non-card Present)

Authorize

Settle

Authorized or Denied

CREDIT CARD PROCESSOR

Get Consumer Funds

CARD ISSUING BANK

MERCHANT BANK

P&L Funds To Merchants
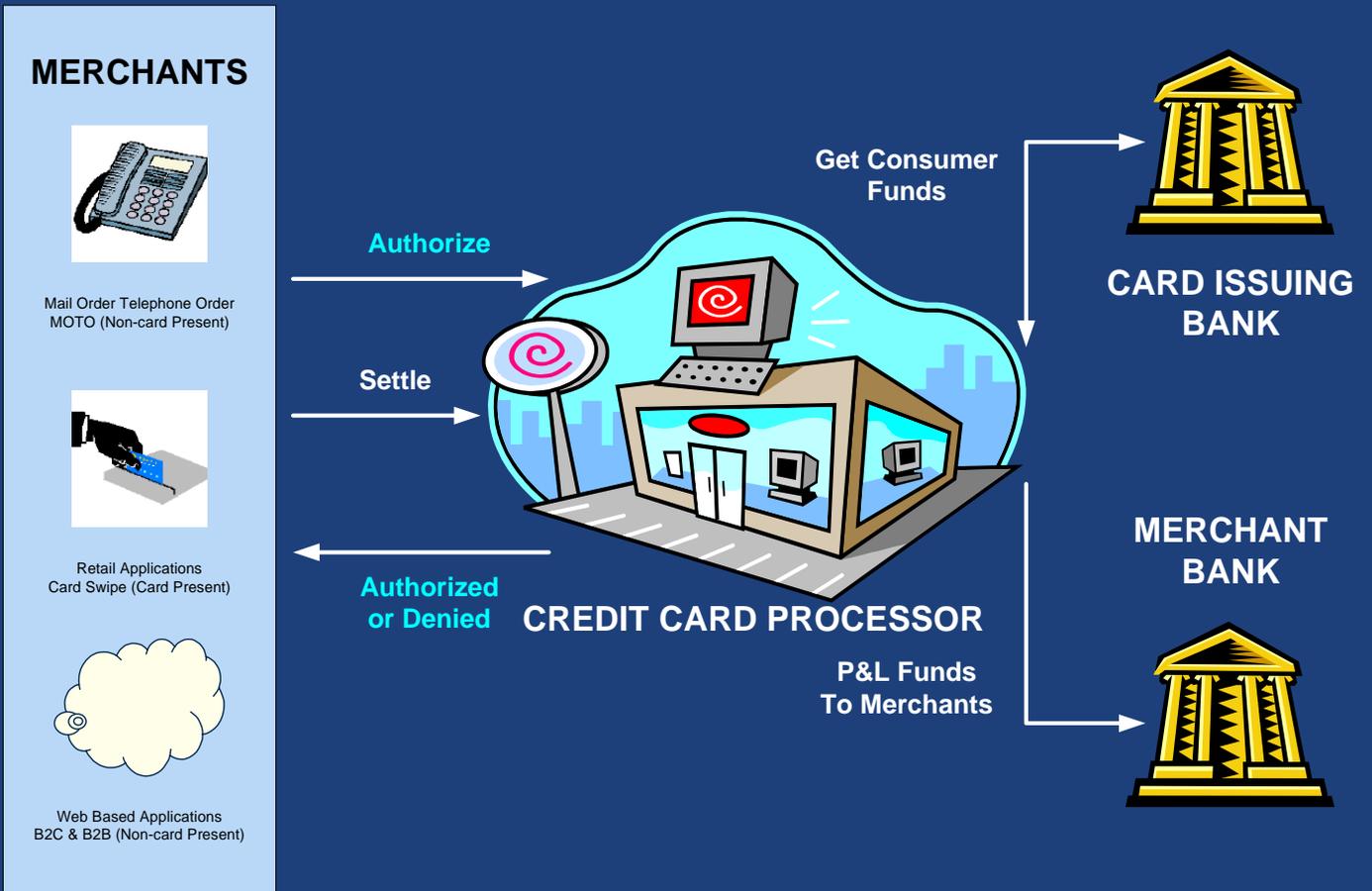
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Interchange Fee

The Interchange function enable banks around the world to exchange information, transactions, money and other items on a standard and consistent basis.


| Cardholder Purchase | Merchant Deposit | Merchant Bank Processor | National Asscoiation | Cardholder Bank | Cardholder Statement |

The Interchange fee is assessed to all merchants and is intended to compensate the cardholder's bank for the free period between the settlement to the merchants bank for cardholder's purchases and the collection of those amounts from the billings to the cardholder
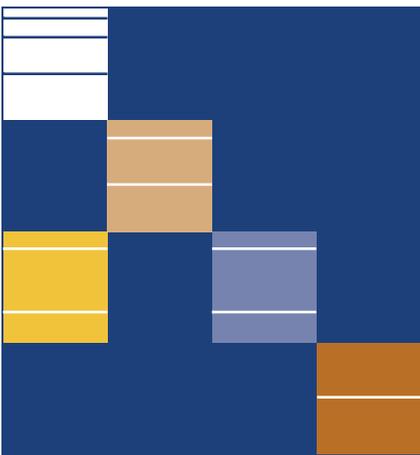
Credit Card 101

Interchange Fee Calculation Example

If the purchase amount is $100.00 and the interchange fee is 1.5% plus 7 cents per transaction, the amount of interchange is calculated as follows:

$100.00 x 1.5% = $1.50 + $.07 = $1.57 (Interchange Fee)

The amount of these fees depend on many factors including whether credit cards are electronically authorized (swiped). In recent years, the interchange systems have been enhanced to consider advanced technologies which lower the risk of accepting fraudulent transactions.
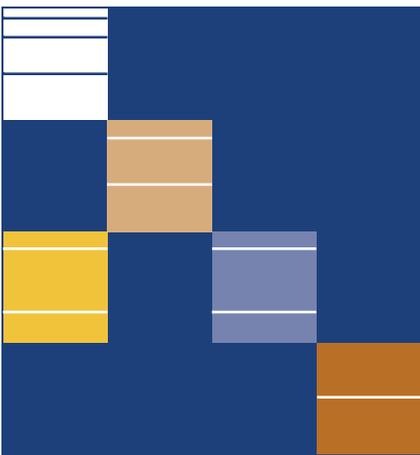
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Background of Payment Service 2000 (Visa)

Payment Service 2000 (PS2000) is a comprehensive strategy designed to ensure continued card program profitability by reducing risk, improving fraud control and reducing the cost of back office processing.

General Rules:

- The card is present

- A signature is obtained

- A single electronic authorization is obtained

- A single clearing transaction (settlement) is obtained

- The transaction is cleared within two days
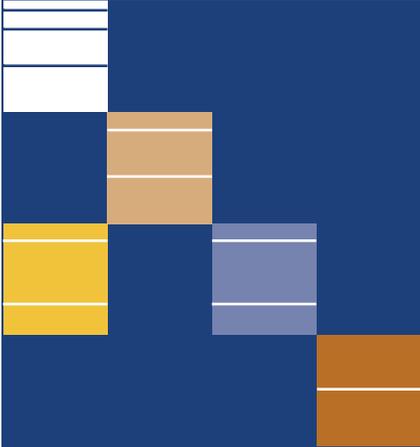
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Visa Interchange Fees

Standard Interchange Reimbursement Fee (SIRF)

- Available to all Custom Payment Service categories
- Any transaction that is NOT eligible for incentive

Electronic Interchange Reimbursement Fee (EIRF)

- Available to all Custom Payment Service categories except secure payments and non-secure electronic transactions
- Transactions must satisfy specific timeliness and data requirements
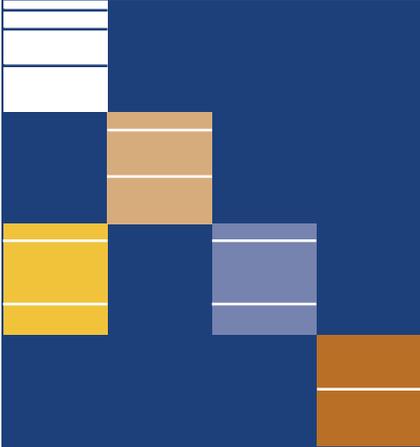
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Visa Custom Payment Service (CPS) Categories

Retail (Card Present)

- CPS/Retail
- CPS/Retail - Key Entry
- CPS/Retail 2 (Emerging Markets)

Direct Marketing (Card Not Present)

- CPS/Card Not Present

E-Commerce (Card Not Present)

- CPS/Electronic Commerce - Basic
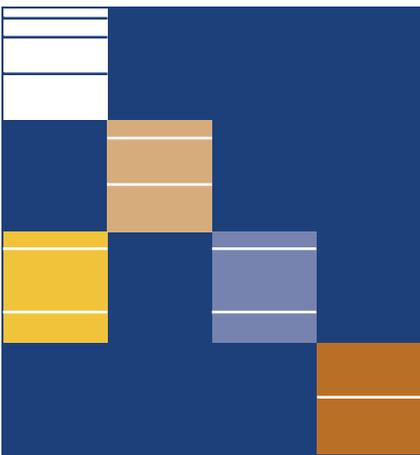
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CPS Category Qualifications

CPS/Retail

- Deposit & clear within two days
- Single authorization for each transaction
- Enriched message format (auth & settle)
- Transmission of full unaltered magnetic stripe (auth)
- Use of retain and return fields (auth & settle)
- Merchant must be located in US
- Purchase within one calendar day of authorization

CPS/Retail 2

- Emerging markets to include Government, Schools, Utility, Insurance & Cable/TV
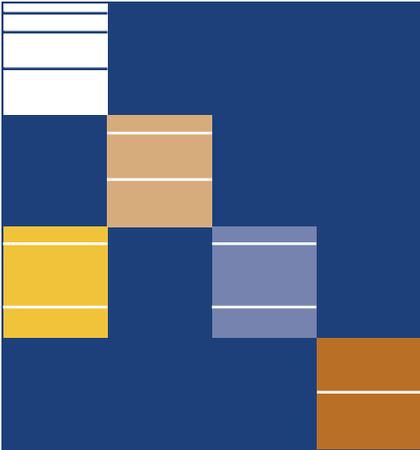
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CPS Category Qualifications Continued

CPS/Retail Key Entry

• One authorization per clearing record allowed

• Cardholder must be present and signature obtained

• Card must be present with key entry due to malfunction of magnetic strip

• Must not be a mail/telephone, electronic commerce transaction or cardholder activated terminal

• Address Verification Service is requested (zip code)

• Transaction must clear in two days
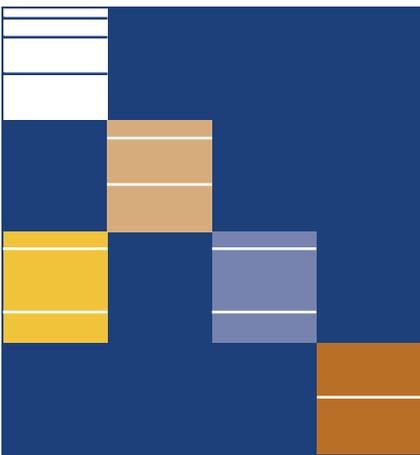
Credit Card 101
CPS Category Qualifications Continued

CPS/Card Not Present

- Card not present

- Single authorization request (one reversal allowed)

- Address Verification Service

- Deposit & clear within two days

- Single clearing transaction

- Transaction date (shipping) must be within 7 calendar days of the authorization date

- Clearing amount must match authorized amount

- Market specific data present (auth & settle)

- Mail order indicator of 1, 2 or 3

- Customer service telephone number required (settle)

- Use of retain and return fields (auth & settle)
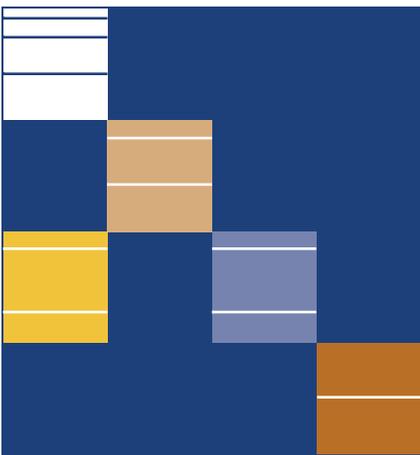
Credit Card 101
CPS Category Qualifications Continued

CPS/Electronic Commerce - Basic

- Card not present, key entered
- Single authorization request (one reversal allowed)
- Address Verification Service
- Deposit & clear within two days
- Single clearing transaction
- Transaction date (shipping) must be within 7 calendar days of the authorization date
- Clearing amount must match authorized amount
- Market specific data present (auth & settle)
- Mail order indicator of 1, 2 or 3
- Customer service telephone number, merchant URL or e-mail address required (settle)
- Secure E-commerce transaction (ECI 7)