Fresher Learning Program

Payment Basics

Agenda

- Clearing and Settlement

- Real Time Gross Settlement

- NEFT Payment

- Swift Payment

- R- Messages

Module Objective
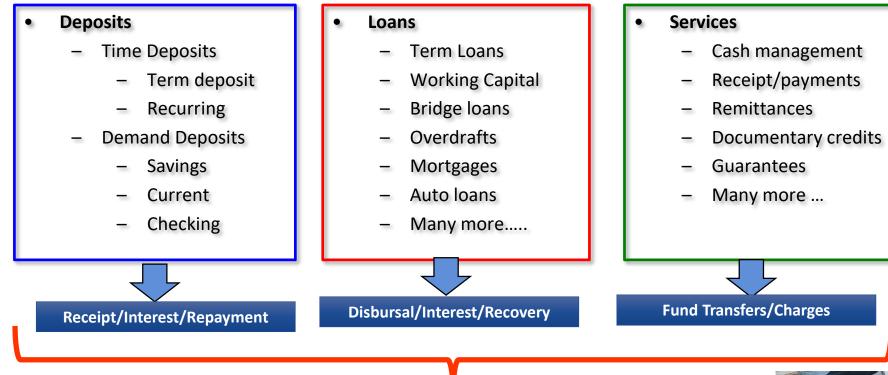
At the end of this module, you will understand:

- Why does a bank make and receive payments ?
- What is payment and settlement ?
- Basic types of payments
- Key elements of payment systems
- "R" messages in payment systems

Let's visit a bank …..

- What products and services does a customer get at a bank ?

Deposits	Loans	Services
• **Deposits**	• **Loans**	• **Services**
– Time Deposits	– Term Loans	– Cash management
– Term deposit	– Working Capital	– Receipt/payments
– Recurring	– Bridge loans	– Remittances
– Demand Deposits	– Overdrafts	– Documentary credits
– Savings	– Mortgages	– Guarantees
– Current	– Auto loans	– Many more …
– Checking	– Many more…..	

Receipt/Interest/Repayment

Disbursal/Interest/Recovery

Fund Transfers/Charges

Transaction Banking

What types of transactions does a customer do?

Payments/deposits

- Within a bank (book transfer) Customer to customer/account to account
- Local (within a city)
- Domestic (within a country) in local currency
- Cross border (across countries) in foreign exchange

Which other entities provide payment services ?

- Post offices
- Mobile payment services, Google Wallet/Paypal/MNO – M-Pesa Model
- Parabanking/legal services like Western Union, Money Gram
- Bitcoin – cryptocurrency
- Illegal services like hawala

Why does a customer route these transactions through a bank ?

- Convenience/ease
- Safety
- Regulation

Paper based payments

- Cash
- Cheque
- Demand draft
- Pay-order/banker's cheque

Electronic payments

- RTGS
- Hybrid payment systems
- Swift payments
- ECS

Card Payments

- Debit Cards
- Credit Cards
- Prepaid Cards

Digital Payments

- E wallets (PayTM, PayUMoney, Mobiwiki)
- IMPS, UPI
- PayPal
- Bitcoin

Key elements of payment systems

Message	Clearing	Settlement

➤ Electronic
➤ Paper
	➤ Net
	   • Bilateral
	   • Multilateral
		➤ Gross
		➤ Net

Netted System - DNS

Real Time Gross Settlement System - RTGS

Hybrid System – Example NEFT

Clearing And Settlement

Crossed Cheque

In India, the Clearing House and Settlement Bank are same.
In other countries, the functions may be separated.

MSD's Account	Rs.25,000	Barclays Account	Rs.25,000	Clearing Account
Clearing Account	Settlement	ICICI Account		Sports Shop Account

RTGS system features

Entities:

- Settlement bank

- Sending bank

- Receiving bank

Used for:

- Only for domestic funds transfers in single currency

Benefits:

- Instantaneous transfer of funds, reducing the time between message and settlement and thus reducing the settlement risk

- Improved business cycle

- Better customer service

Story Example 1 – Real Time Gross Settlement System

- Larsen and Toubro Limited, Mumbai has an account with HSBC Bank Mumbai

- L&T wants to immediately remit an amount of INR 10.00 lakhs to General Motors, having account with HDFC Bank, Delhi

- It uses the Real Time Gross Settlement System of Reserve Bank of India to remit the funds

HSBC Account

HDFC Account

RTGS Account

L&T Account

RTGS Account

GM Account

-Rs.10,00,000

+Rs.10,00,000

1. Payment categories : Urgent and Normal
2. Offsetting of transactions
3. Future value dated transactions
4. ISO 20022 Message types

Story Example 2 – Hybrid Settlement System/NEFT

- Larsen and Toubro Limited, Mumbai has an account with HSBC Bank Mumbai.

- L&T wants to remit an amount of INR 50,000 to General Motors, having account with HDFC Bank, Chennai.

- It uses the National Electronic Fund Transfer (NEFT) System of Reserve Bank of India to remit the funds.

Structured Financial Messaging Solution (SFMS)

HSBC Account

HDFC Account

NEFT Account

L&T Account

NEFT Account

GM Account

-Rs.50,000

+Rs.50,000

Netting and settlement
Presently, NEFT operates in hourly batches - there are eleven settlements from 9 am to 7 pm on week days and five settlements from 9 am to 1 pm on Saturdays

SWIFT PAYMENTS

Codes used in Payment Systems

- BIC (ISO 9362) : 8 or 11 characters

- KKKBINBBXXX (Kotak Bank, India, Bombay)

- NATAUS33 (National Australia Bank, USA, New York)

- BIC1 : KKBKINB1XXX

- CHIPS Bank Number : 0772 = NATAUS33

- ABA Codes : Routing Code – 9 characters

- IBAN (ISO 13616)

- Upto 34 alphanumeric characters

- GB82HSBC12345698765432

- IFSC Codes (Indian Financial System Code-11 characters)
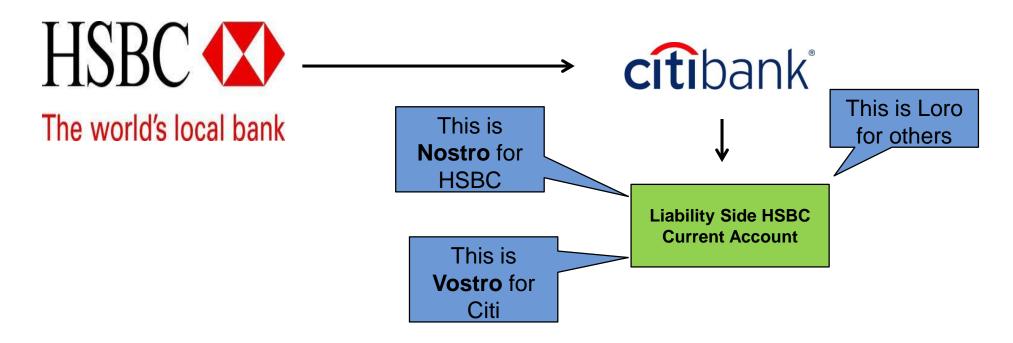
Correspondent banking
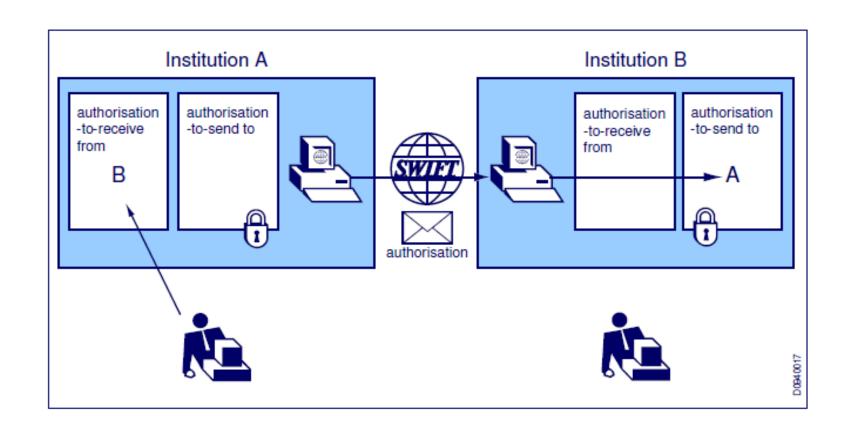
1. HSBC opens an account in Citibank
2. The account is opened in the books of Citibank. Citibank calls it "Vostro" (yours)
3. HSBC calls is "Nostro" (mine).

Relationship Management Application - RMA

Megacorp banks with HSBC UK. It wants to remit USD 100,000 to Michelin Tyres banking with Citibank New York.

This is a cross border transaction.
HSBC USA is correspondent of HSBC UK.
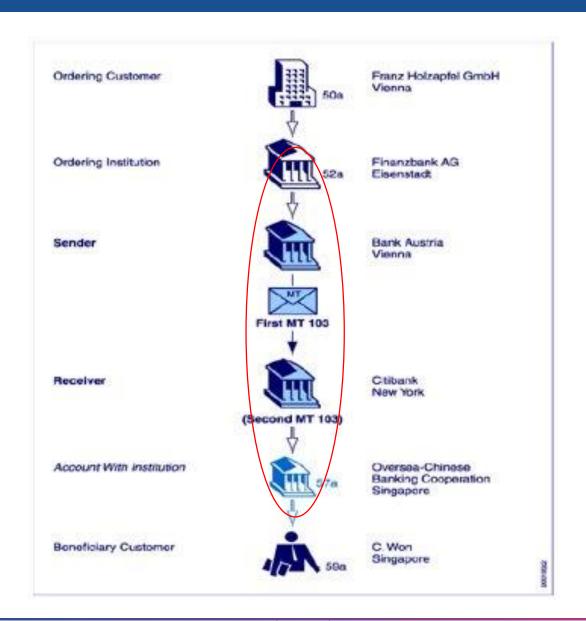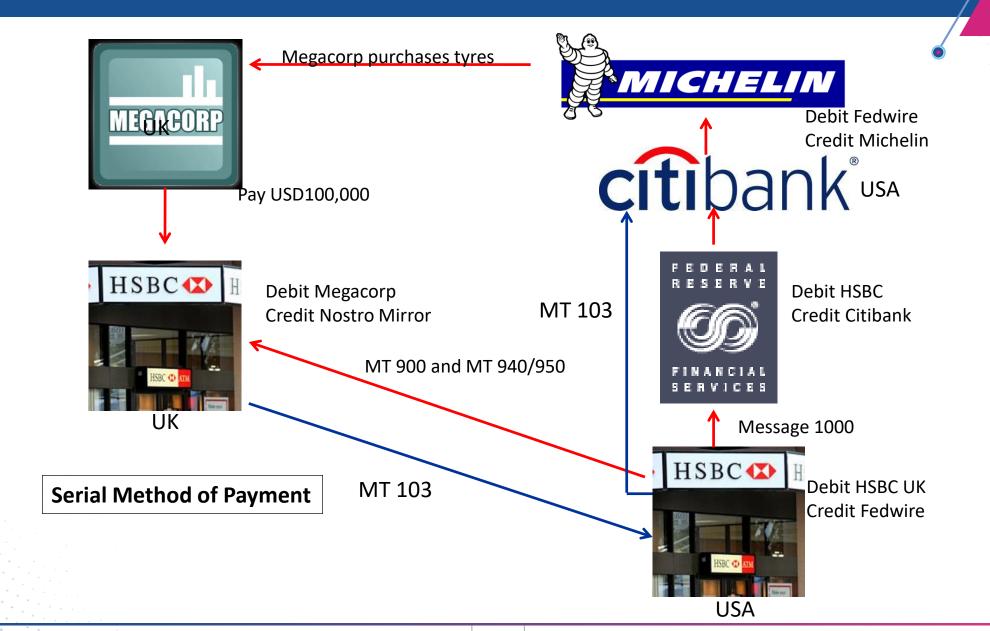
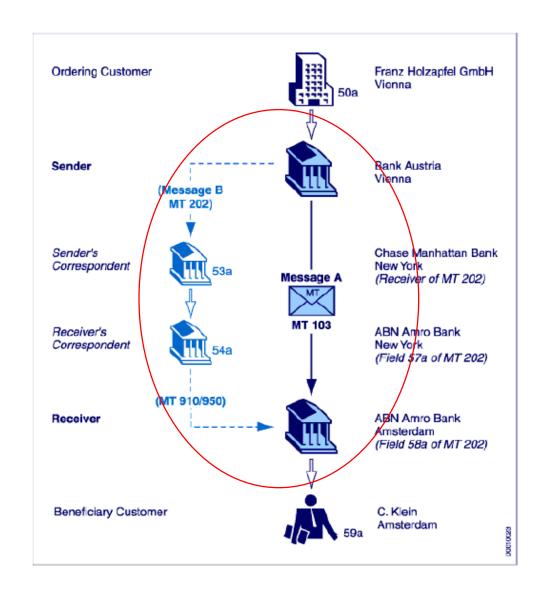Let's look at how this transaction will take place.

Sample MT 103

Cover Method of Payment
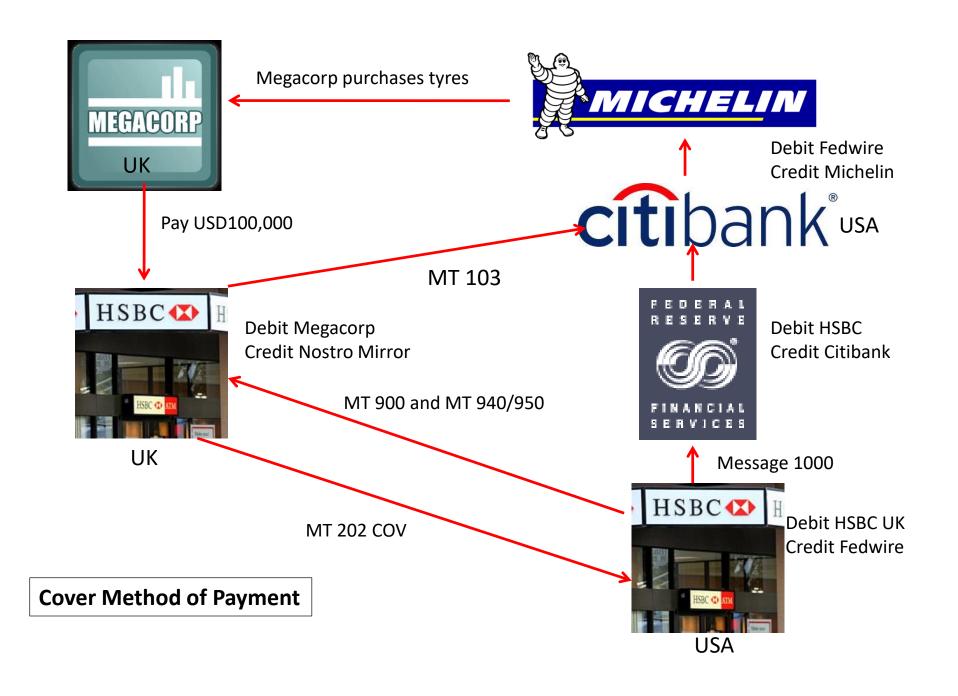
"R" MESSAGES

- **Reject (for credit transfers):**

- A 'Reject' occurs when a **credit transfer** is not accepted for normal execution **before inter-bank settlement**. If the rejection is at the point at which the Originator instructs the Originator Bank, the Originator Bank need only inform the Originator of the reason.

- **Return (for credit transfers):**

  — A '**Return**' occurs when a **credit transfer** is diverted from normal execution **after interbank settlement**, and is sent by the Beneficiary Bank to the Originator Bank for a credit transfer that cannot be executed for valid reasons such as wrong account number or account closed with the consequence that the Beneficiary account cannot be credited on the basis of the information contained in the original credit transfer message.
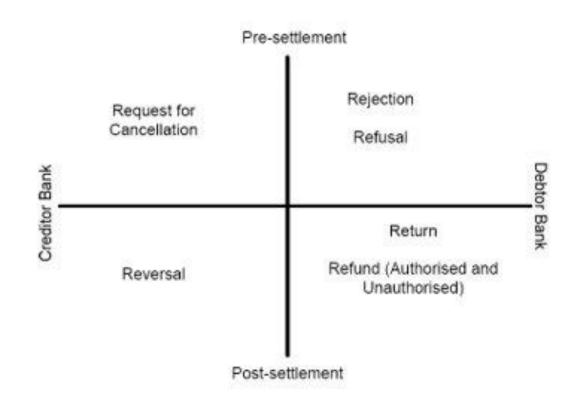
- **Recall (for credit transfers):**

  — A 'Recall' occurs when the Originator Bank requests to cancel a Credit Transfer after **interbank settlement.**

- Request for cancellation
- Reject
- Refusal
- Return
- Refund
- Reversal
- Revocation

Pre-settlement

Request for Cancellation

Rejection

Refusal

Creditor Bank

Debtor Bank

Return

Reversal

Refund (Authorised and Unauthorised)

Post-settlement

GLOBAL LOCATİONS

INDIA

SINGAPORE

UK

US

DUBAI

RIYADH

MALAYSIA

MEXICO

CORPORATE HEADQUARTERS
Lords Tower, Block 1, 2ⁿᵈ Floor
Jawaharlal Nehru Road,
Thiru Vi Ka Industrial Estate
Ekkaduthangal, Chennai – 600 032

www.maveric-systems.com