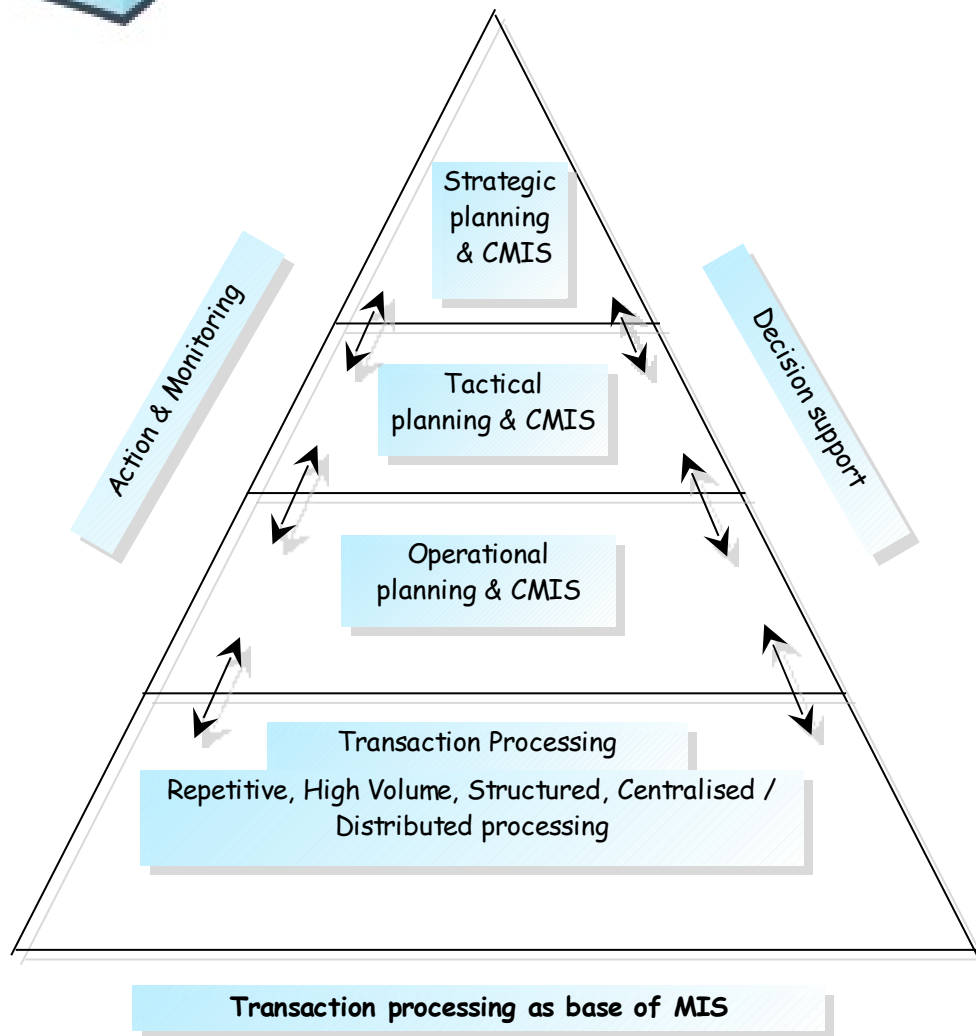


## Transaction Processing System





Transaction :- It is that affects flow of resource of the entity.

TPS :- ( most fundamental business process system)

- It aims at expediting & improving the routine business activity.
- Std. Operating procedures, which facilitate handling of transaction – embedded – entry of data, processing, search & presentation of Data & information
- High volume of well understood transactions associated with the operating level

A transaction processing cycle (TPC) organizes transaction by organization business processes. The nature & its type depend on the need of a specific organization

- Four common cycles of business activity :-
  1. Revenue cycle :- sale & collection
  2. Expenditure cycle :- Purchase & payment
  3. Production cycle :- resource →( process ) →WIP →( process ) → F.G.
  4. Finance cycle :- acquisition and mgt. of funds

However Fifth cycle is Financial Reporting Cycle : which is not an operating cycle. - it obtains accounting and operating data from other cycles and processes the data in such a manner that financial reports may be prepared.

#### **Characteristics of TPC**

- The objective of grouping like transaction is to cluster these transaction together in a way that simplifies information processing.
- Information processing within TPC require Recording, Maintaining & Reporting ( keyword : **RMR**) on the business activities that make up a business process.
- TPC consists of one or more applications
- The concept of TPC provides a frame-work for analyzing organizational activities
- Generate statistical data for MIS
- It provides a basis for categorizing flow of economic events that are common to all organizations.
- Helps analyze the entity's business activities

#### **Components of TPS ( Key : I.P.O. 'S )**

**1. Input:** It is the source document. It serves the following purposes :

- Capture data.
- Facilitate operations by communicating data and authorizing other operations in the process.
- Standardize operations.
- Provide a permanent file for future analysis.

**2. Processing :** It involves use of journals and registers to provide a permanent and chronological record of input. The common special journals are :

1. Sales journal :- to summarize sales on A/c.
2. Purchase journal :- to summarize purchase on A/c.
3. Cash receipt journal :- to summarize receipt on A/c.
4. Cash payment journal :- to summarize payment on A/c.

- **Computer processing :** There are two modes for computer processing (i) batch processing and (ii) direct processing.

1. Batch processing :

- Batches of the transaction are accumulated as a transaction file.
- The transaction file provides input to the accounting system.
- Subsequently, it is posted to the ledgers and then periodically processed.

## 2. Direct processing :

- Individual transactions are posted directly rather than accumulating them in the batches of transaction files.
- The processing converts data into information. The management is interested in the summary data. Its interest in Transaction files is temporary – i.e., once it is processed to update the master file it is no longer of direct interest. Like the Mgt. has a permanent interest in the information contained in A/c. receivable master file.
- The reference file and table file contain data to support data processing.

## 3. Storage : - The ledgers and files provide storage of data in both manual and computerized.

- Computer storage : A file is collection of data. There are several types of files.
- Types of files
  1. Master files
  1. Transaction files
  2. Report files
  3. Table files
  4. Reference files
  5. History files
  6. Backup files

( ref : - my notes on EDP for C.A.Inter / Information Technology Pe2)



**Keyword :- Master Transfer his Report on Table to Refer History Back**

(hmm... remember it was in pe2 ..... hmm.... well not much detail required in C.A.Final)

## 4. Output : There are wide varieties of outputs from TPS. Any document generated in it is an output. Some are both output and input ( e.g. Customer invoice is an output from order-entry application system and also an input document to customer )

### Coding of data :

For TPS to process data efficiently, accounting data are often coded.

There are many types of code

Classification codes	Function Codes	Significant-digit subset codes
Mnemonic Codes	Hierarchical classification	Sequence Codes
Block Codes	Group Codes ,etc	

\*\* ( well, some of them are discussed in detail in chp. 8 System Design )

Choice of the code and the way they are constructed is determined by :the code's use

1. The need for consistency;
2. Consideration of design efficiency;
3. An allowance for growth;
4. The desire to use standard code throughout a company.

\*\* (Well, this is nothing, but like characteristics of good coding system – which are also discussed in detail in chp. 8 System Design with KEYWORD)

