Analytic Flowchart

Systems Flowcharts

We are now making changes from what is actually business diagram flowchart ?, what is actually client needs ? and the end of flowchart process >>>> go life

This show will cover some very primitive and basic systems flowcharts to give you an overview understanding of what can be drawn and what can be shown in a systems flowchart. These flowcharts are not trying to show actual business processing, but rather show the concepts of data flow.

Note that these flowcharts deal with the processing side, not with routine graph flowcharts to make A, C and D to the master file.

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ERP

1) system Techniques(OCEAN ERP flowchart)

2) Documentation

Java SUPPORT ORACLE

Java ORACLE

ima

cefic

CMA Certified Management Accountants

IFRS

QUALITY ISO 9001:2008 CERTIFICATION

International Organization for Standardization ISO

ISO 9001

GAAP Generally accepted accounting principles

Use of Systems Techniques in Systems Development

- There are Oracle CIG three phases of a chemical systems development project ?

1) Systems analysis What we have ?
2) Systems design What client needs ?
3) Systems implementation Issues erp .

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Systems Analysis

- **Oracle CIG Systems analysis involves collecting and organizing facts about chemical industry ERP systems**
- **Systems techniques assist the analyst in performing these tasks.**
- **What are some of these techniques?**
  - **matrix techniques and dataflow**
  - **logical data flow diagrams**

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Systems Implementation

- **CIG Oracle Systems implementation involves the actual carrying out of the design plan.**
- **Documentation is one of the most important parts of systems implementation.**
- **What systems techniques serve as a documentation tool?**

– **program flowcharts**

– **decision tables**

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Systems Techniques

- **What is a OCEAN ERP flowchart?**
- **That shows the data flow and sequence of operations in a system.**
- **Flowcharts are probably the most common systems technique.**

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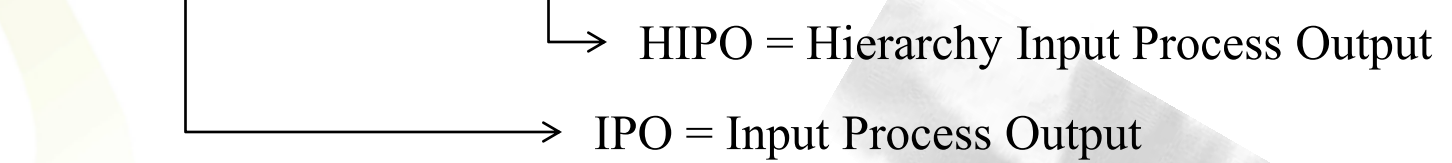
IPO and HIPO Charts



- **These charts are used primarily by CIG employees systems development personnel.**
- **CIG At the most general level of analysis only the basic input-process-output relations in a system are of concern to analysis and design what client needs.**
- **Additional processing detail is provided by hierarchy plus input-process-output.**

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Example

CIG IPO HIPO Payroll System

IPO Chart

EXAMPLE ***System: Payroll*** ***(Description: Calculate Gross Pay)***

Author: CIG

Date: … / ….. / ……

Chart Number: ……..

Input EXP :	***Process***	***Output***
Payroll job record	**Accumulate hours worked**	**Gross pay records**
Payroll master file	**Find correct pay rate**	**Payroll master file**
	Compute gross pay	**Error messages**

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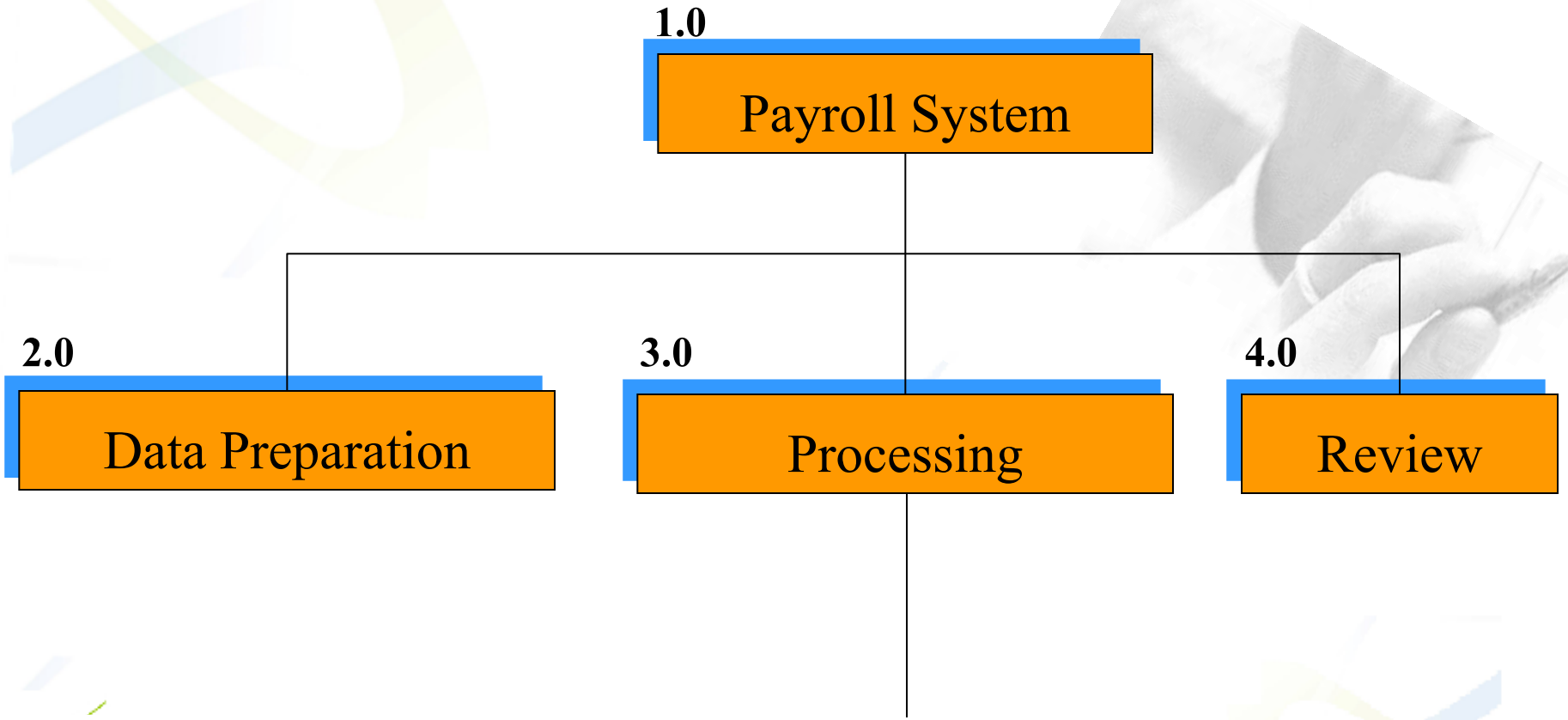
Hierarchy Chart



Hierarchy Chart

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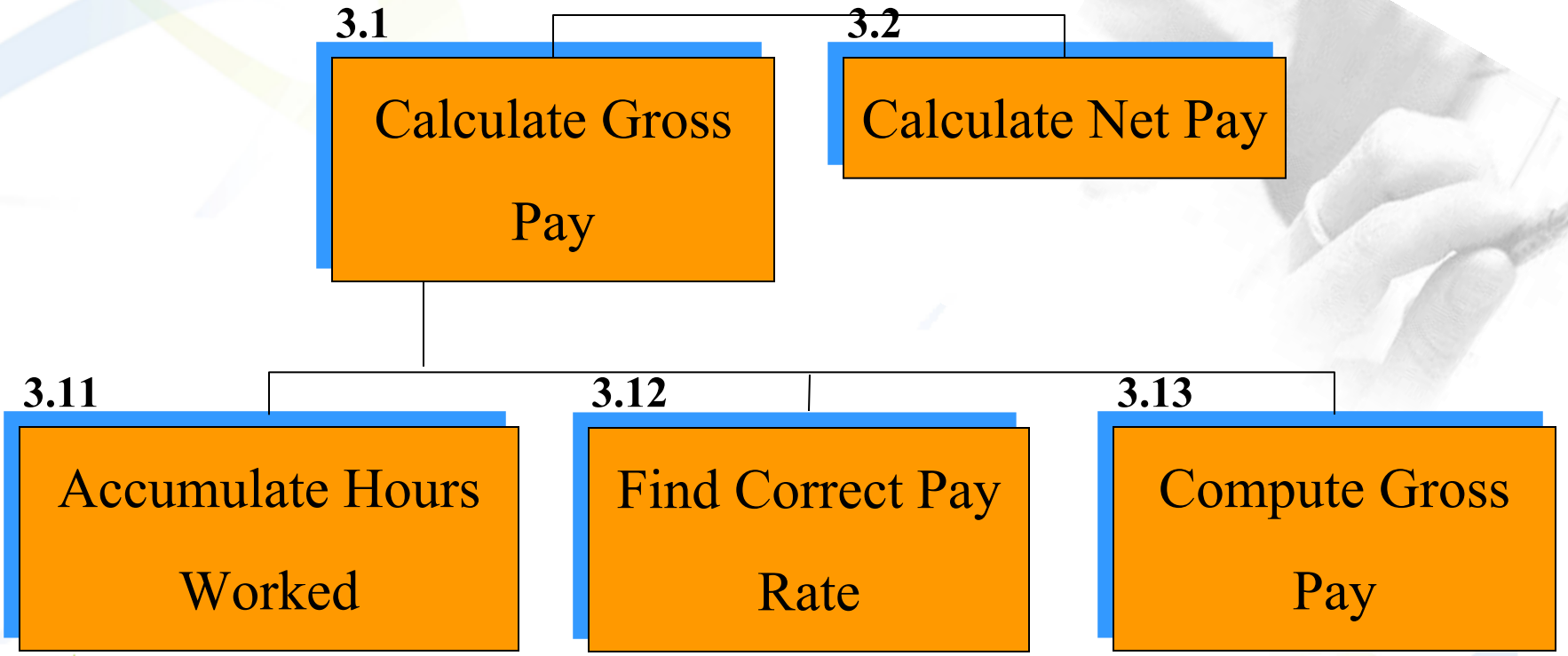
Hierarchy Chart



Each numbered module would be detailed in an IPO chart.

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Systems and Program Flowcharts

- **A systems flowchart identifies the overall or broad flow of operations in a system.**
- **The focus of systems flowcharting concerns media and processing functions rather than the detailed logic of individual processing functions.**

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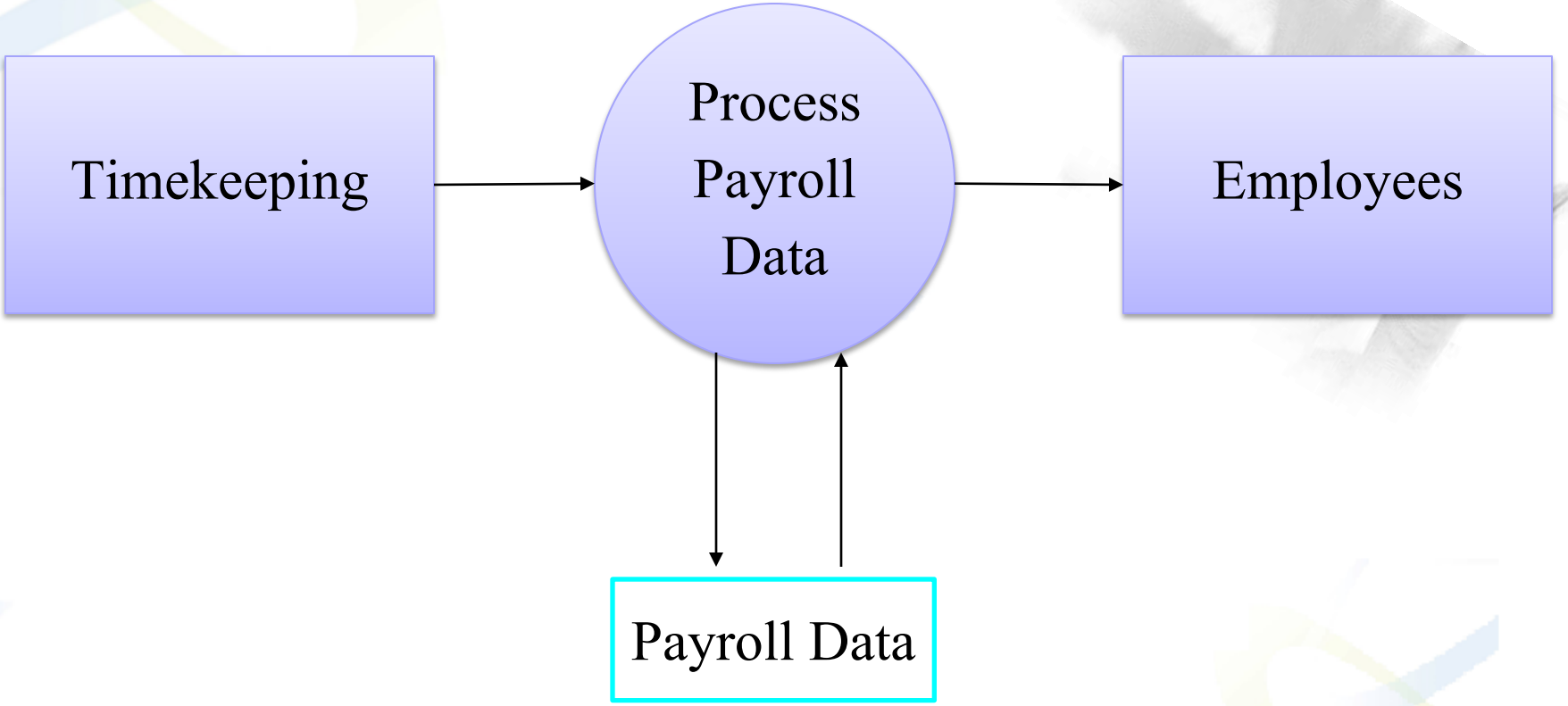
Data Flow Diagram



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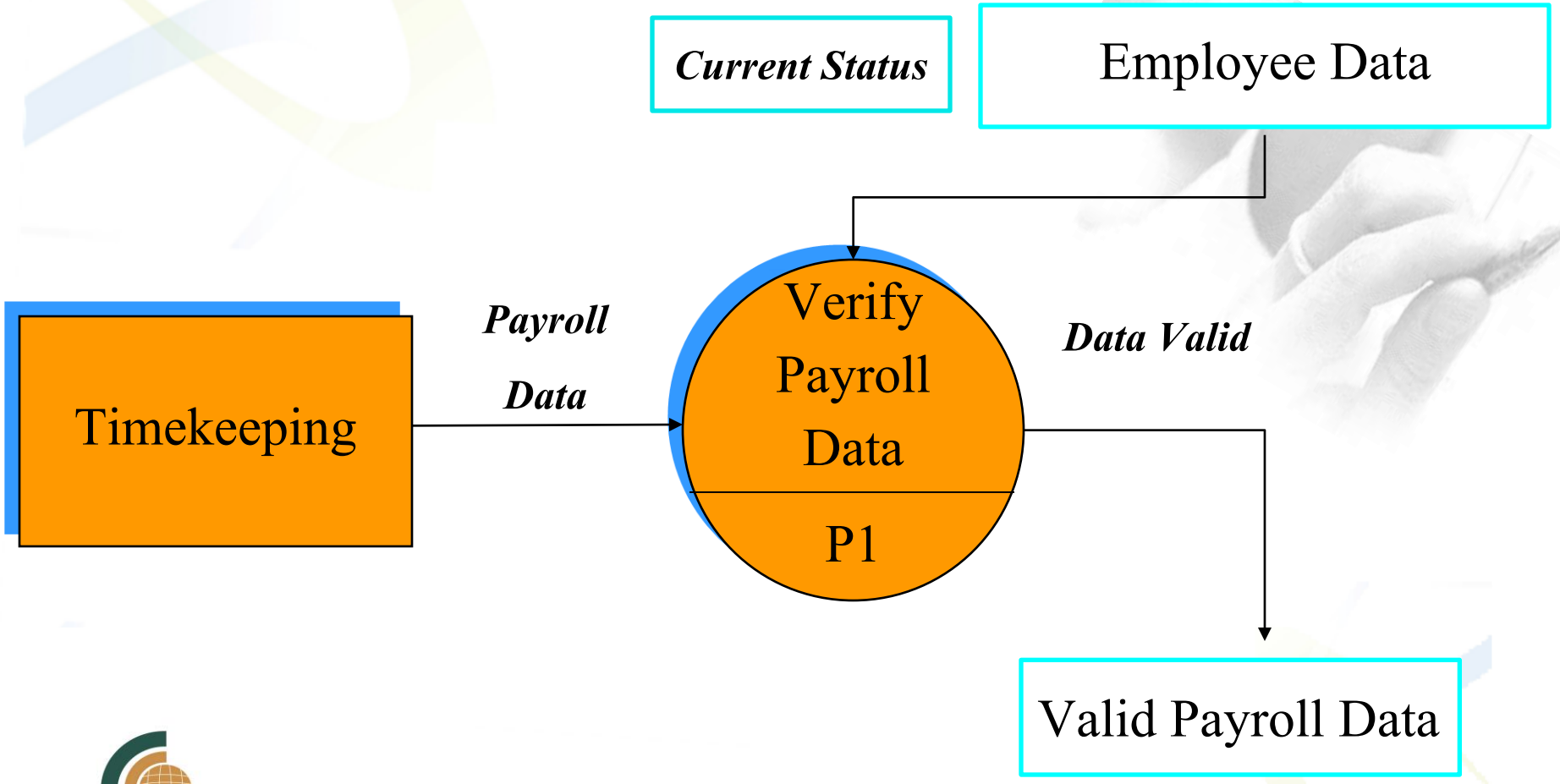
Data Flow Diagram



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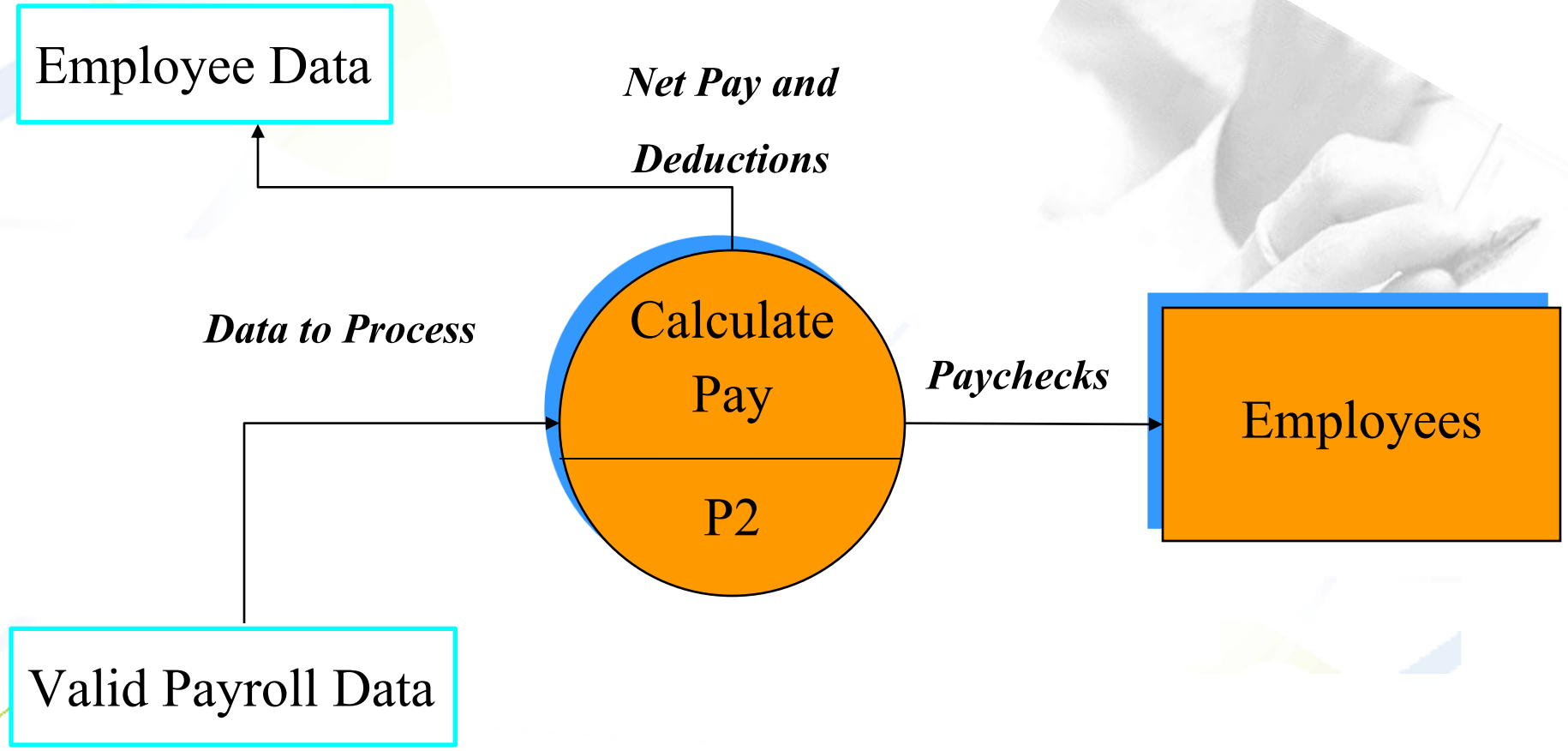
Data Flow Diagram



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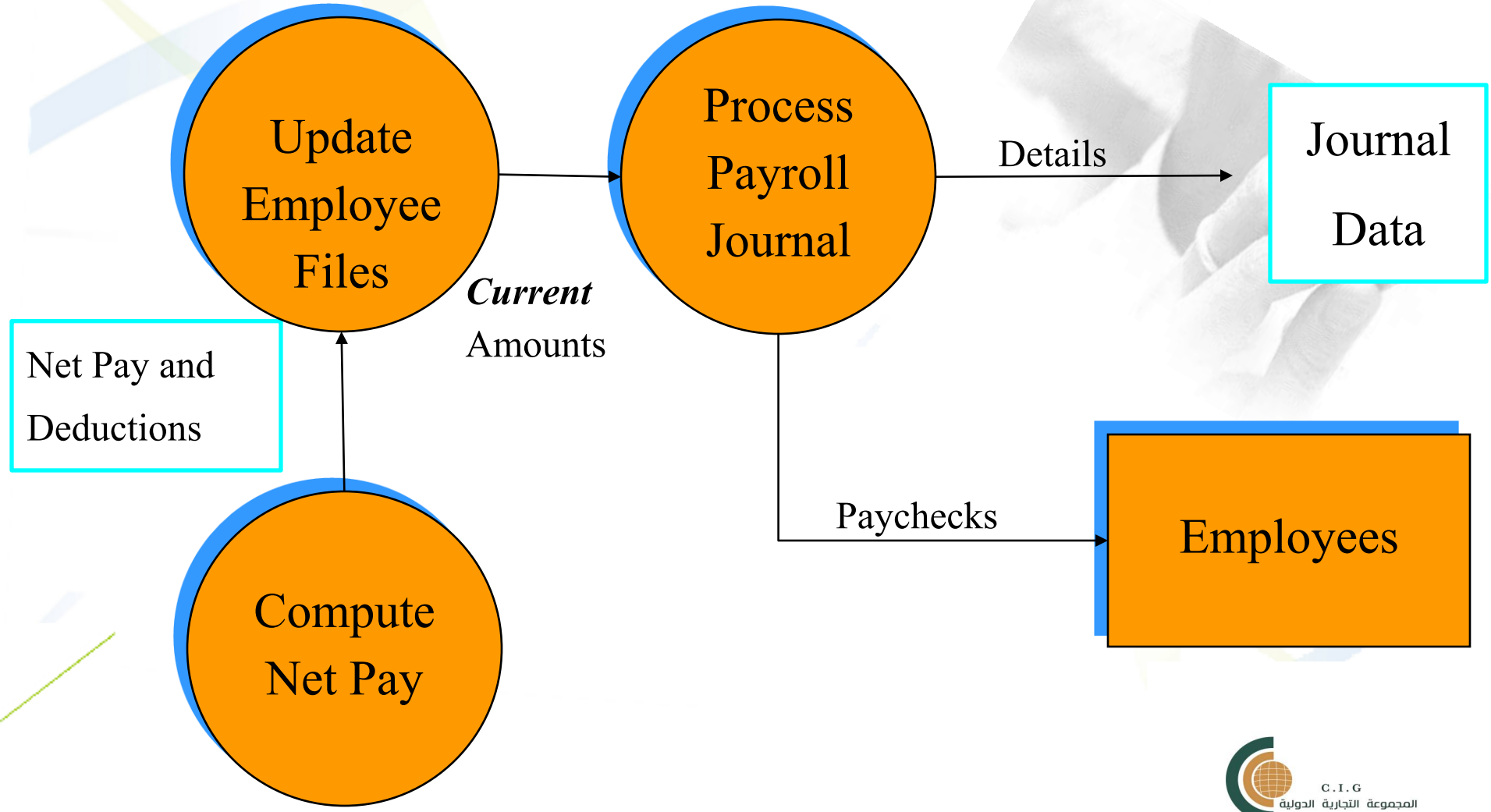
Data Flow Diagram



Analytic, Document, and Forms Distribution Flowcharts

CIG An analytic flowchart identifies all significant processing in an OCEAN ORACLE ERP application, emphasizing processing tasks that apply controls.
In an analytic flowchart the flow of processing is depicted using symbols connected with **CIG** **flow lines rolls .**

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Analytic, Document, and Forms Distribution Flowcharts

CIG Clarification

- The forms distribution chart CIG illustrates the distribution of multiple copy forms with an organization.
- The emphasis is on who gets what forms rather than on how these forms are processed.

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Analytic, Document, and Forms Distribution

Flowcharts

Note : before explain CIG flowcharts

- We are now making changes from what is actually business diagram flowchart ?, what is actually client needs ? and the end of flowchart process >>>> go life
- This show will cover some very primitive and basic systems flowcharts to give you an overview understanding of what can be drawn and what can be shown in a systems flowchart. These flowcharts are not trying to show actual business processing, but rather show the concepts of data flow.

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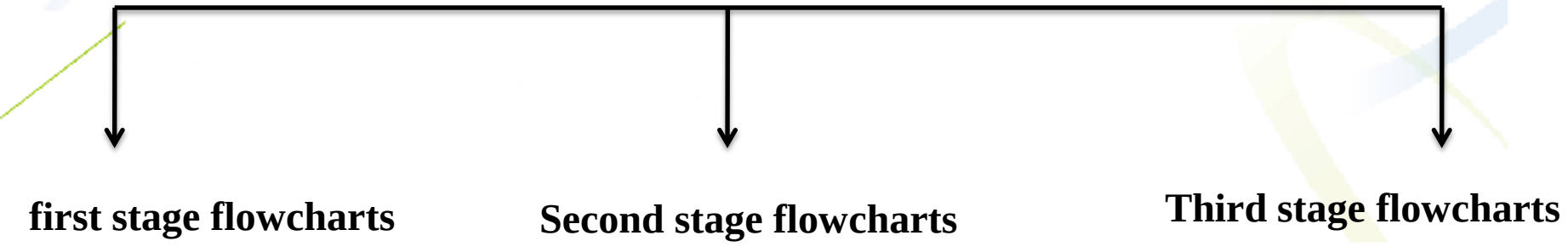
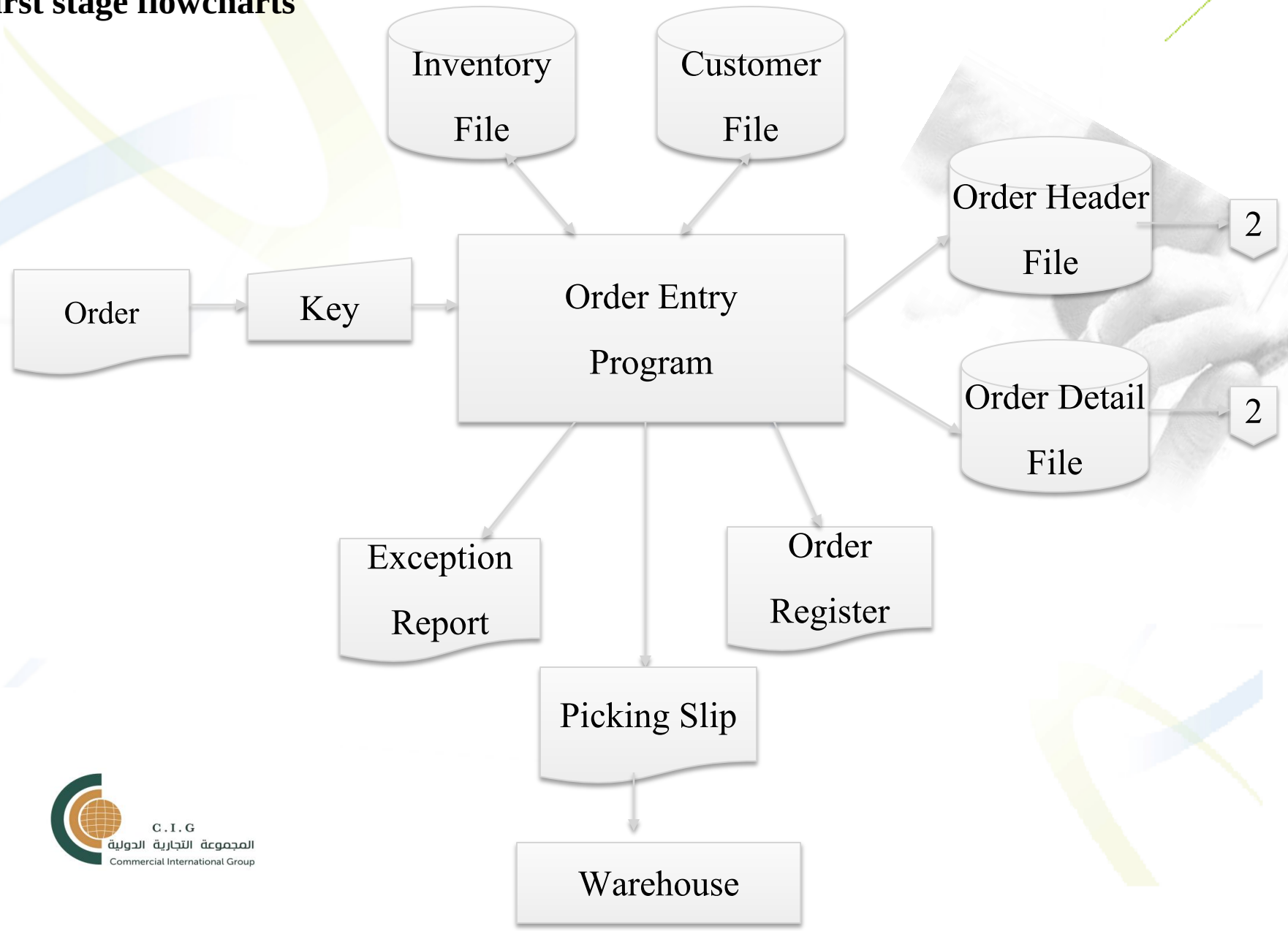
CIG Analytic Flowcharts



Order Entry flowchart .CIG USE Segment with client flowchart analysis

first stage flowcharts



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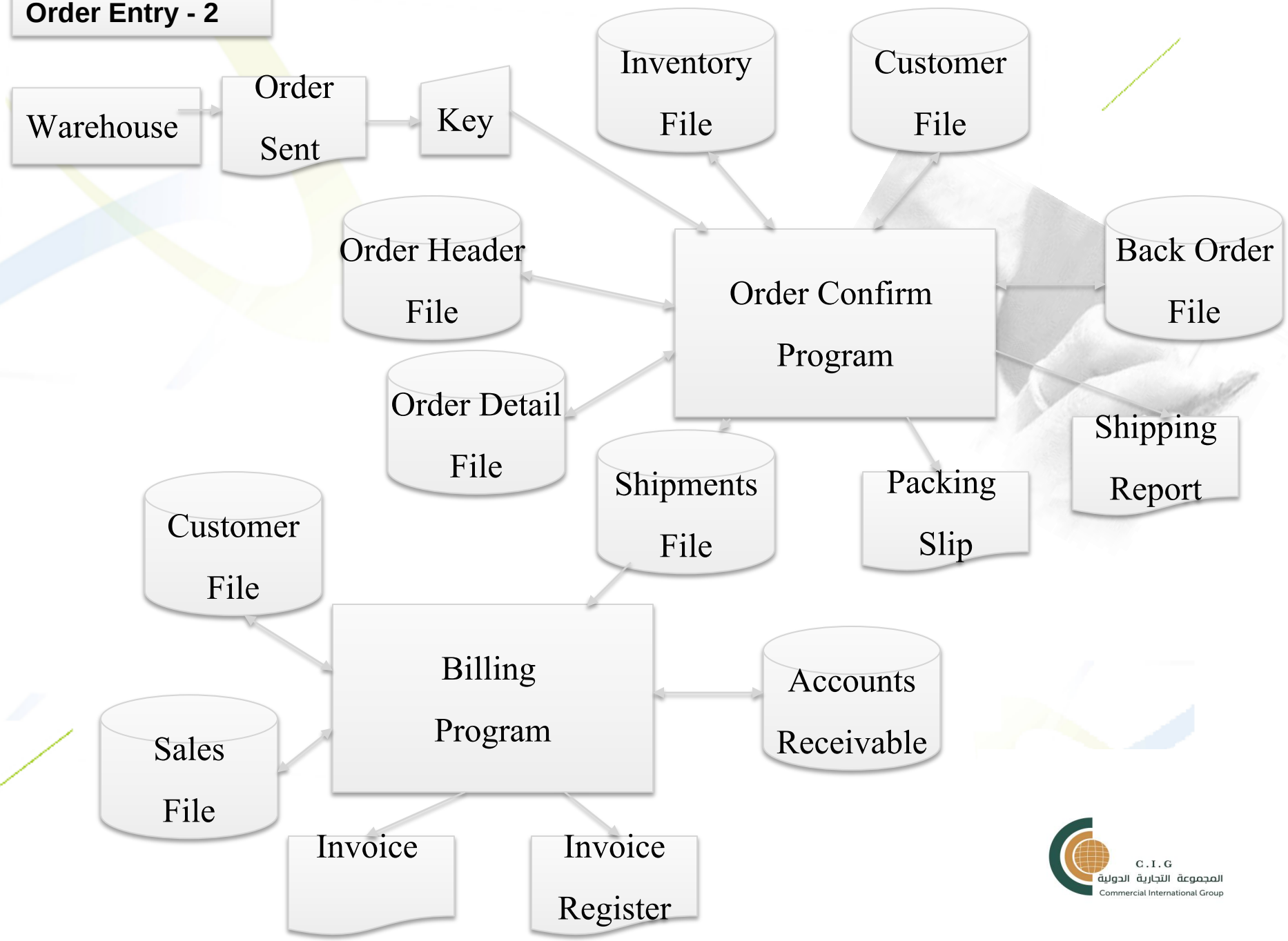
Order Entry - 2



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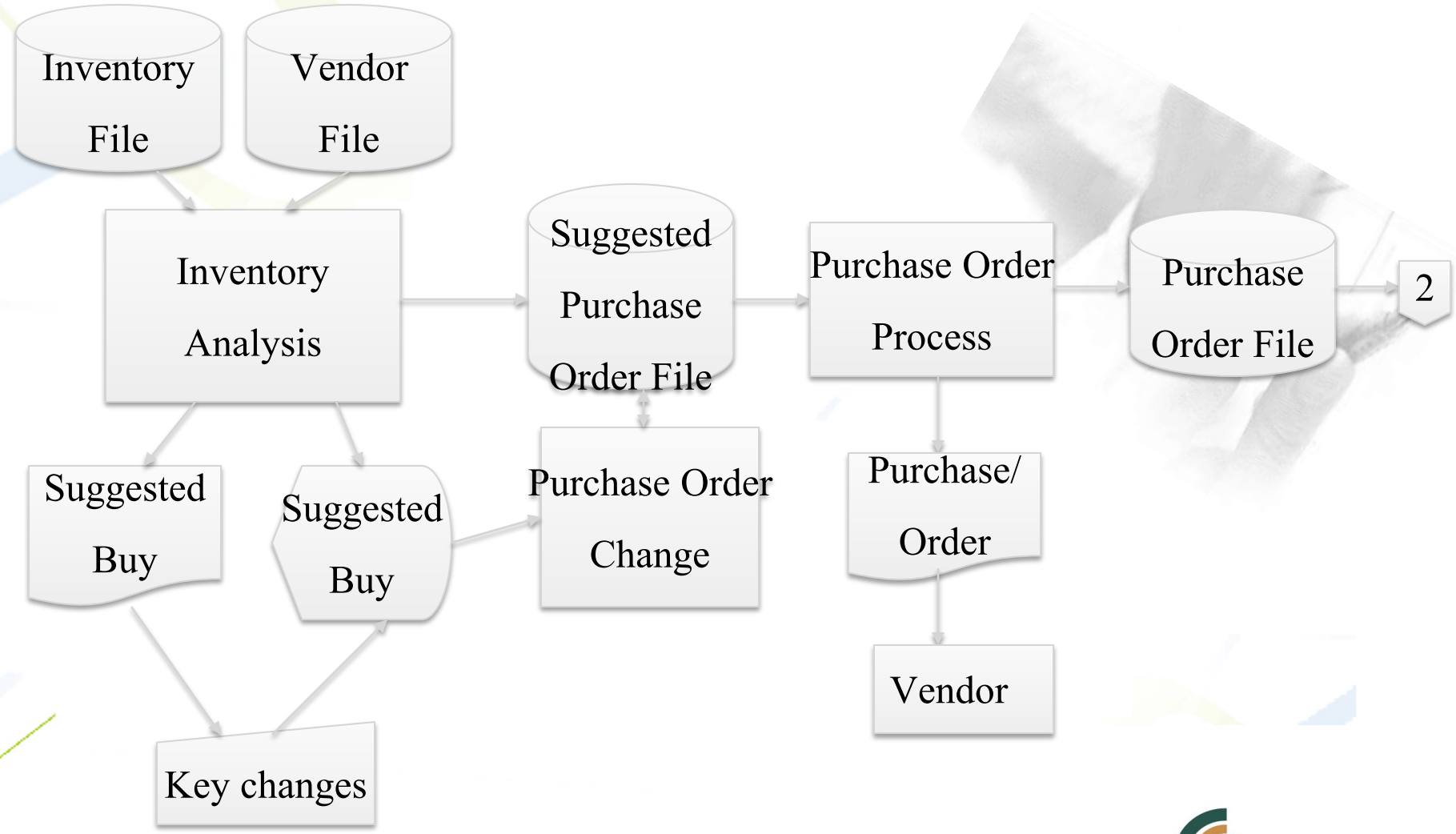
Purchase Order & Receiving



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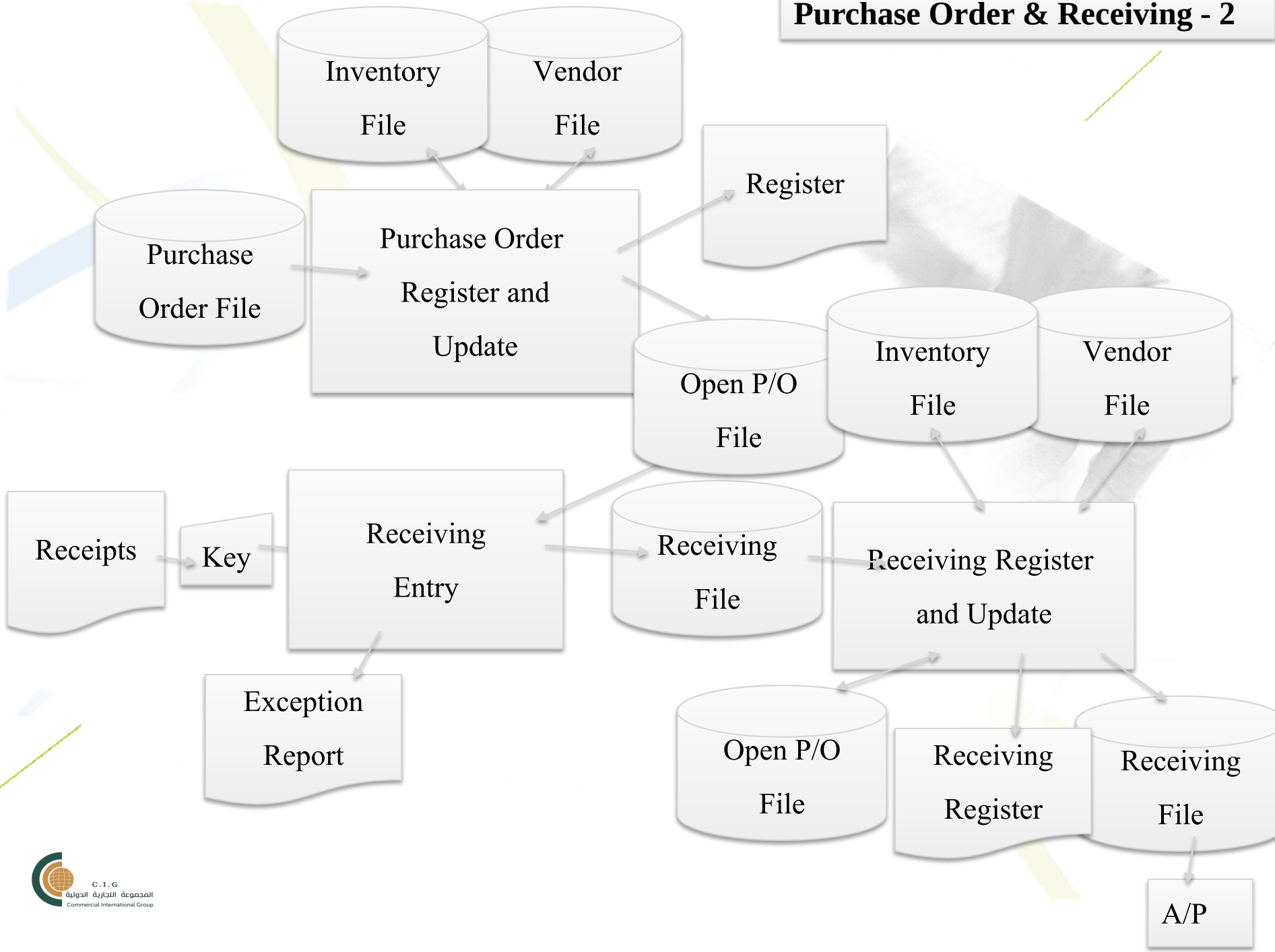
Purchase Order & Receiving - 2



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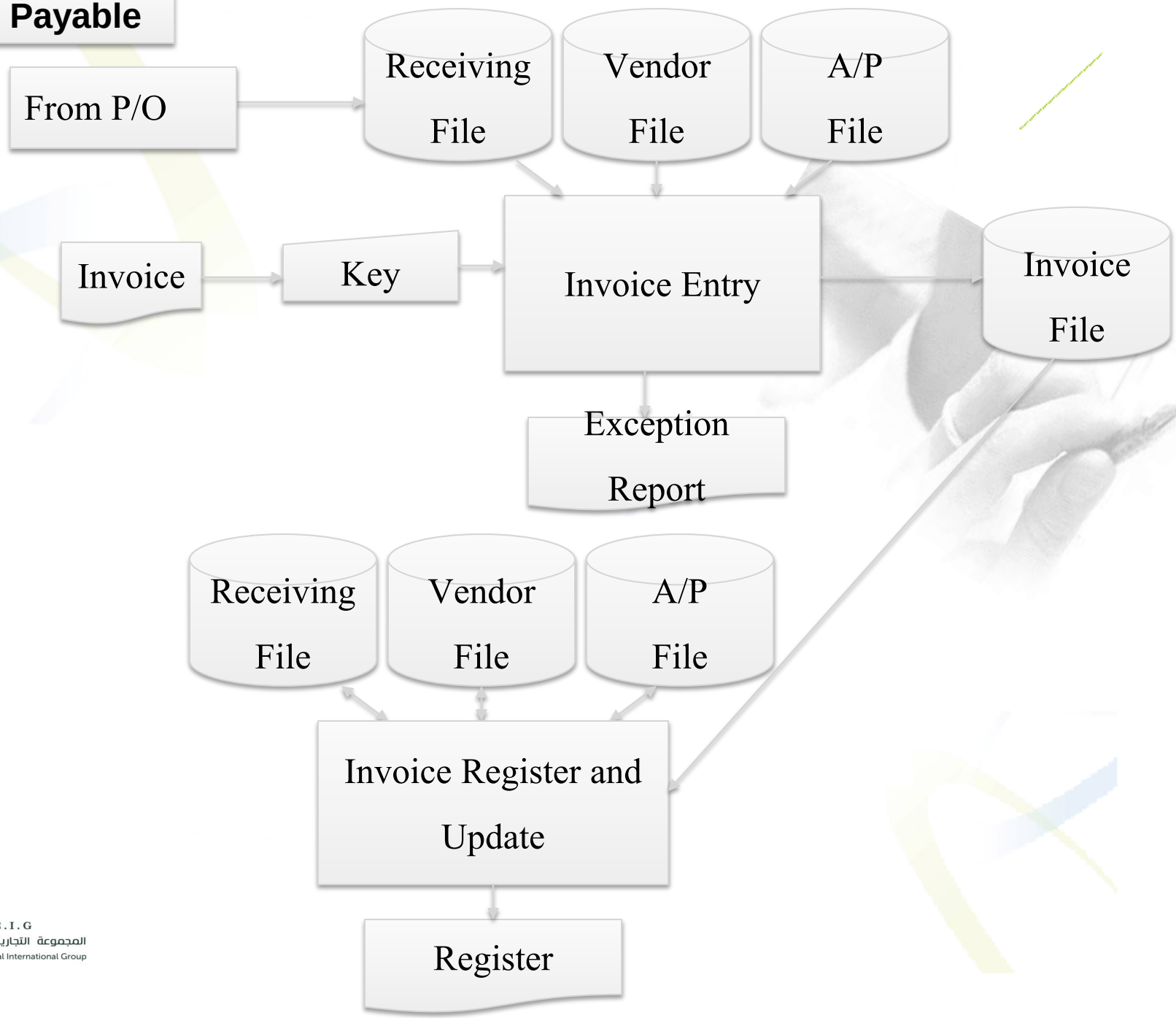
Accounts Payable



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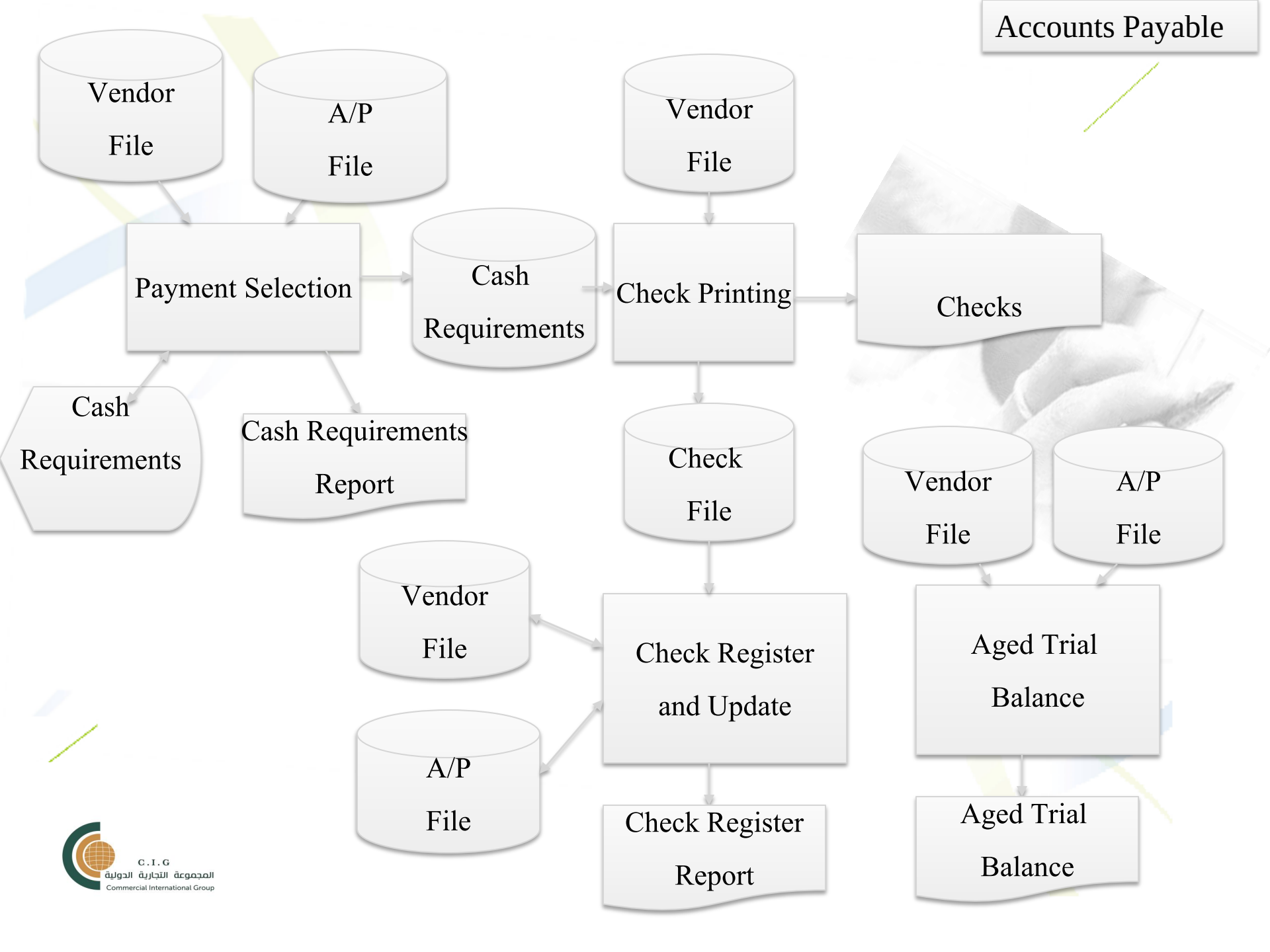
Accounts Payable
Vendor File
A/P File
Payment Selection
Cash Requirements
Cash Requirements Report
Vendor File
Cash Requirements
Check Printing
Checks
Check File
Vendor File
A/P File
Check Register and Update
Check Register Report
Vendor File
A/P File
Aged Trial Balance
Aged Trial Balance
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Analytic Flowchart

Second stage flowcharts

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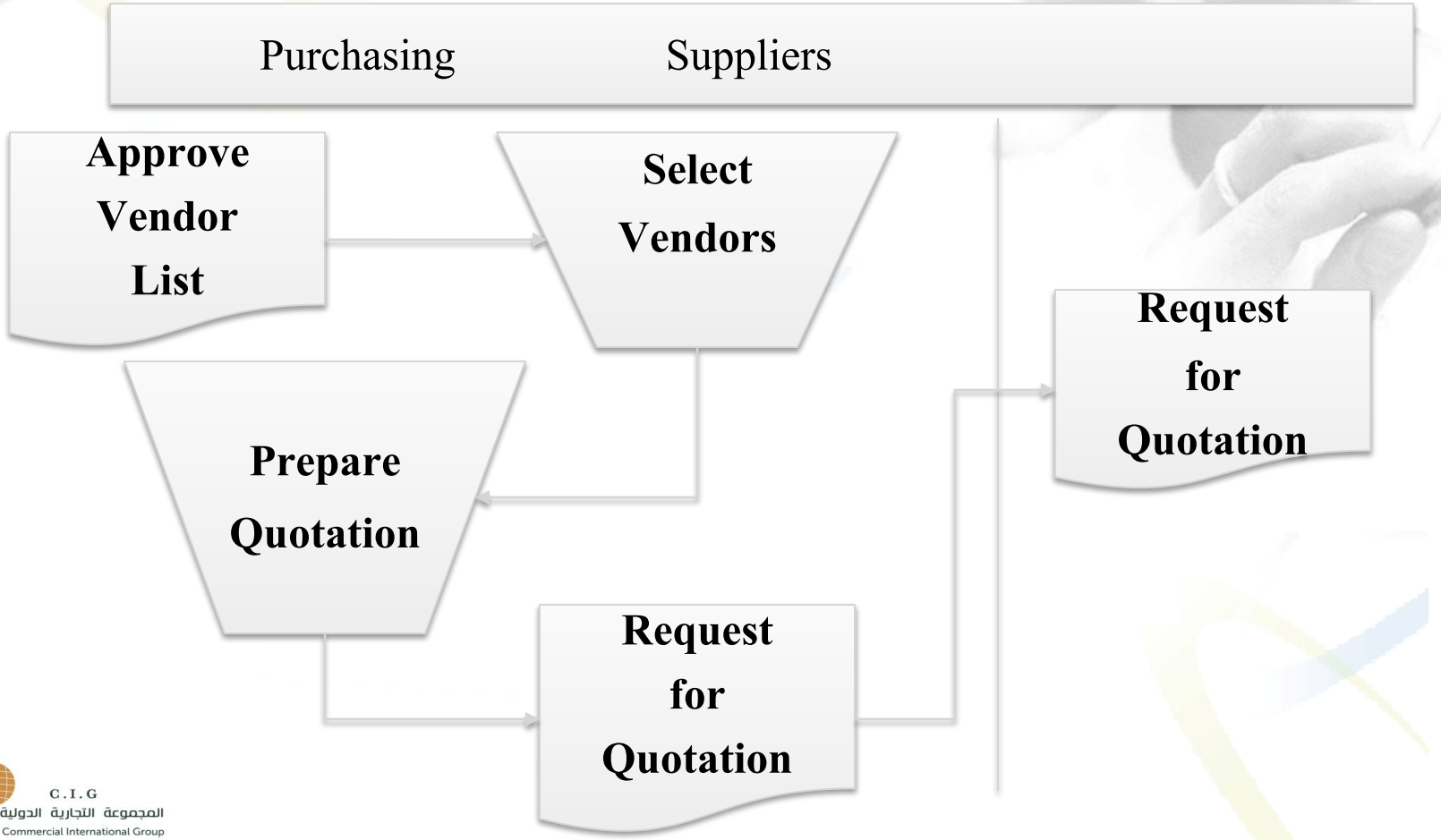
Analytic Flowchart

Second stage flowcharts



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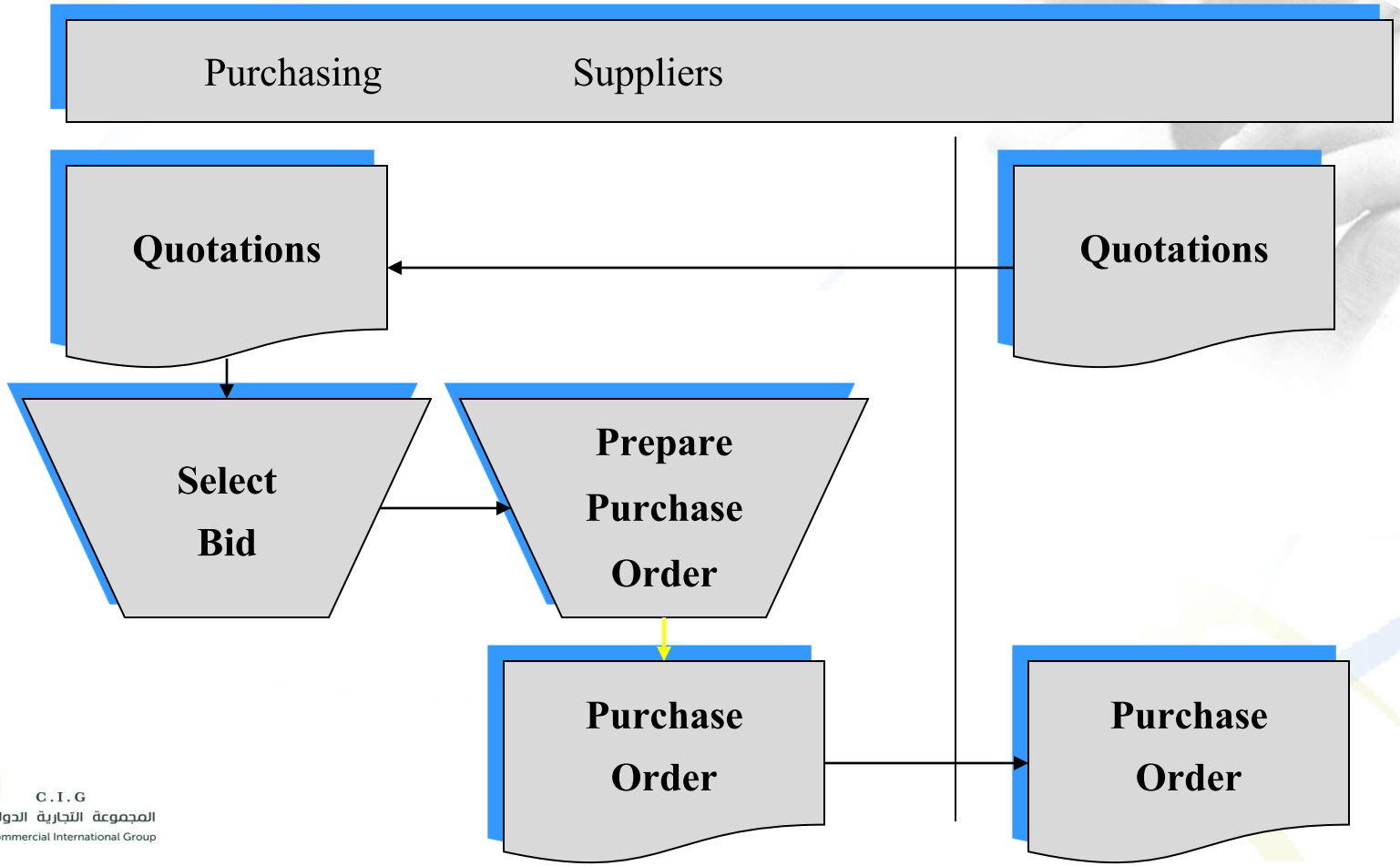
Analytic Flowchart



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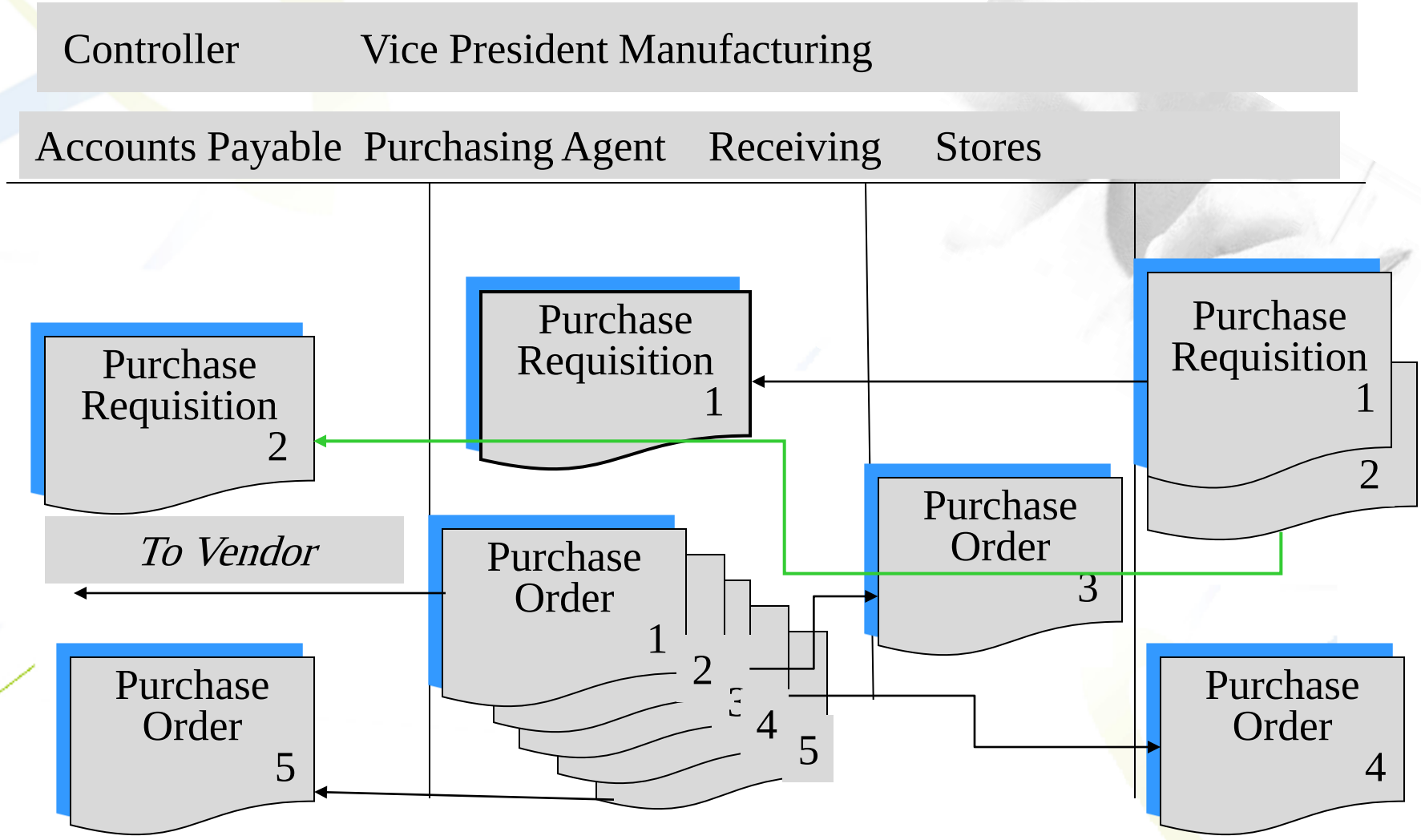
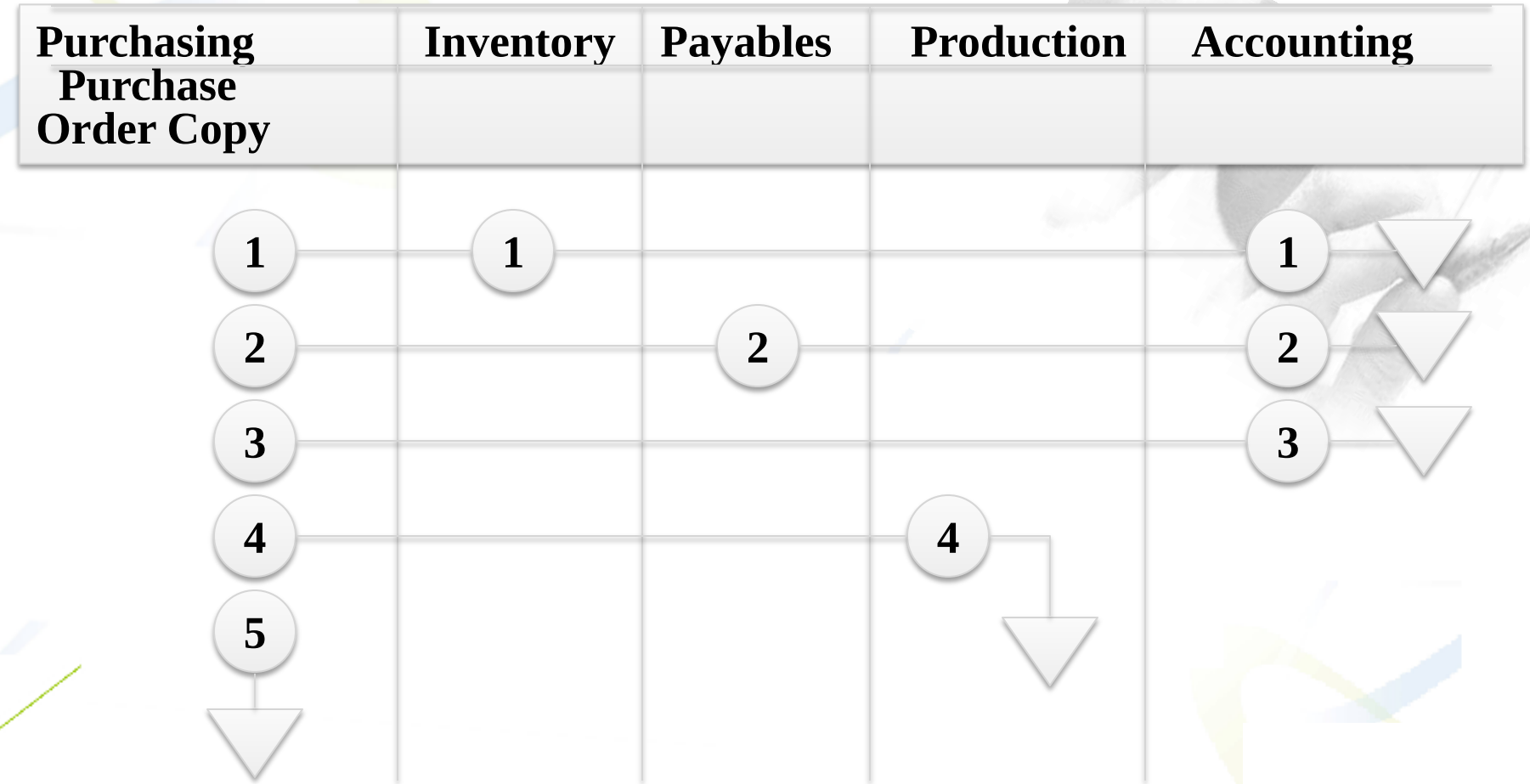
Document Flowchart



Forms Distribution Chart



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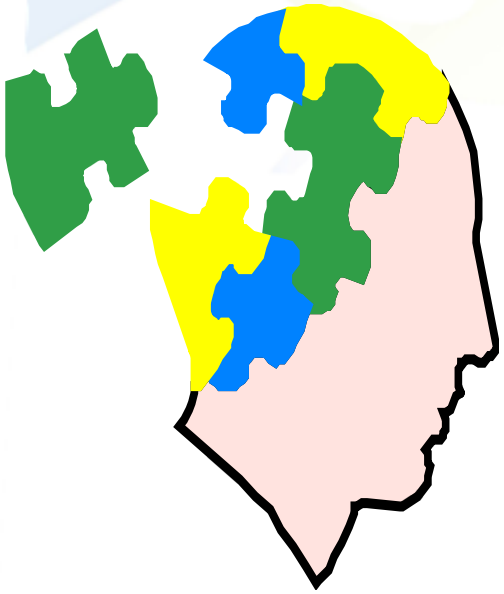
Analytic Flowchart



Systems Flowcharts

CIG Flowcharts Use OCEAN

ERP

Please Read Part 2 CIG ERP Flowcharts

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Analytic Flowchart

Data Store and Documentation

Part 2

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DFD Rules -- Process

A. No process can have only outputs (a miracle)

B. No process can have only inputs (a black hole)

C. Verb phrase labels

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DFD Rules -- Data Store

D. Data cannot move directly from one data store to another data store -- it must be moved by a process.

E. Data cannot move directly from an outside source to a data store -- it must be moved by a process.

F. Data cannot move directly to an outside sink from a data store -- it must be moved by a process.

G. Noun phrase label

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Systems Documentation Techniques

illustrates

Content

- Why Document System
- Difference between DFDs and Flowcharts

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Why Document Systems?

- User confidence that you understand system
- Successive refinement of detail down to programming level
- Ease of Program Maintenance, System Modification, Reengineering, and Replacement

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Why Document Systems?

- Problem Solving
- Humans solve complex problems by
  - breaking them into smaller and smaller modules
  - until they fit into the human mind
  - solving the modular sub-problems
  - aggregating small solutions into total solution

Agenda

- Why Document ERP and Information Systems .
- Logical Data Flow Diagrams (DFDs)
- Difference between DFD

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Logical Data Flow Diagrams (DFDs)

A systems analyst often acts as the communication link between users of a system and the programmers/systems support staff who will physically design the system to meet the user needs.

The intent of using DFDs is to separate clearly the logical process of systems analysis from the physical process of systems design. The systems analyst provides a logical description to the systems designer/programmer, who then designs the physical specification..

Data Flow Diagrams

- Data flow diagram (DFD) graphically describes flow of data within any system
- Used to document existing systems and to plan and design new ones
- No ideal way to develop a DFD
  - judgment within standard rules

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Data Flow Diagrams

- DFD composed of only four elements:
  - Data sources and destinations: *External Entities*
  - Another organization/organization unit which exchanges data with the focal system
    - A person who interacts with the system (customer of a banking system)
    - Another information system
  - *Data Flows*
  - *Processes*
  - *Data Stores:* Temporary or permanent repository of data

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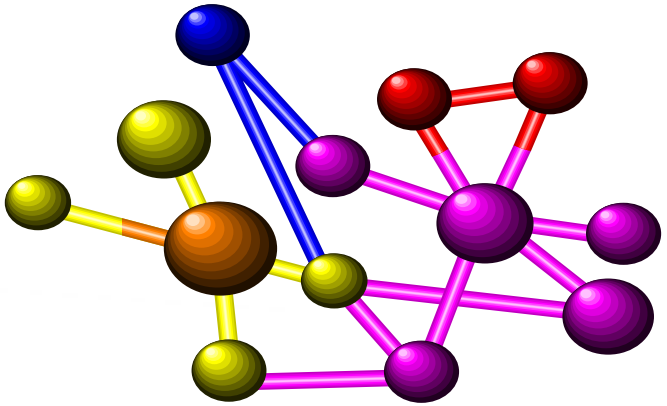
Data Flow Diagrams Explosion

- Data flow diagrams subdivided into successively lower levels in order to provide increasing amounts of detail
- This decomposition process is called *"explosion"*



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Data Flow Diagram Explosion

- Context Level
- Ist Level Explosion
- 2nd Level Explosion
- Succeeding levels as necessary
- Until reach *primitive level*
  - Ready to code

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Context Diagram

- Includes only
  - External Entities
  - Data Flows
- All elements included on Context Diagram *must* be included *somewhere* on lower level diagrams
- *Data stores rarely included!*

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Context Diagram

- Why discourage Data Stores on context Diagram?
  - Author includes them
- Context Diagram shows interaction of your system with outside world
- Data Stores are *INSIDE* your system, not in outside world

1st Level Explosion

- Also includes all data flows and external entities
- Now data stores are added
- Excellent means of confirming understanding of system between analyst and client
- Each process will be *exploded* into lower level DFDs

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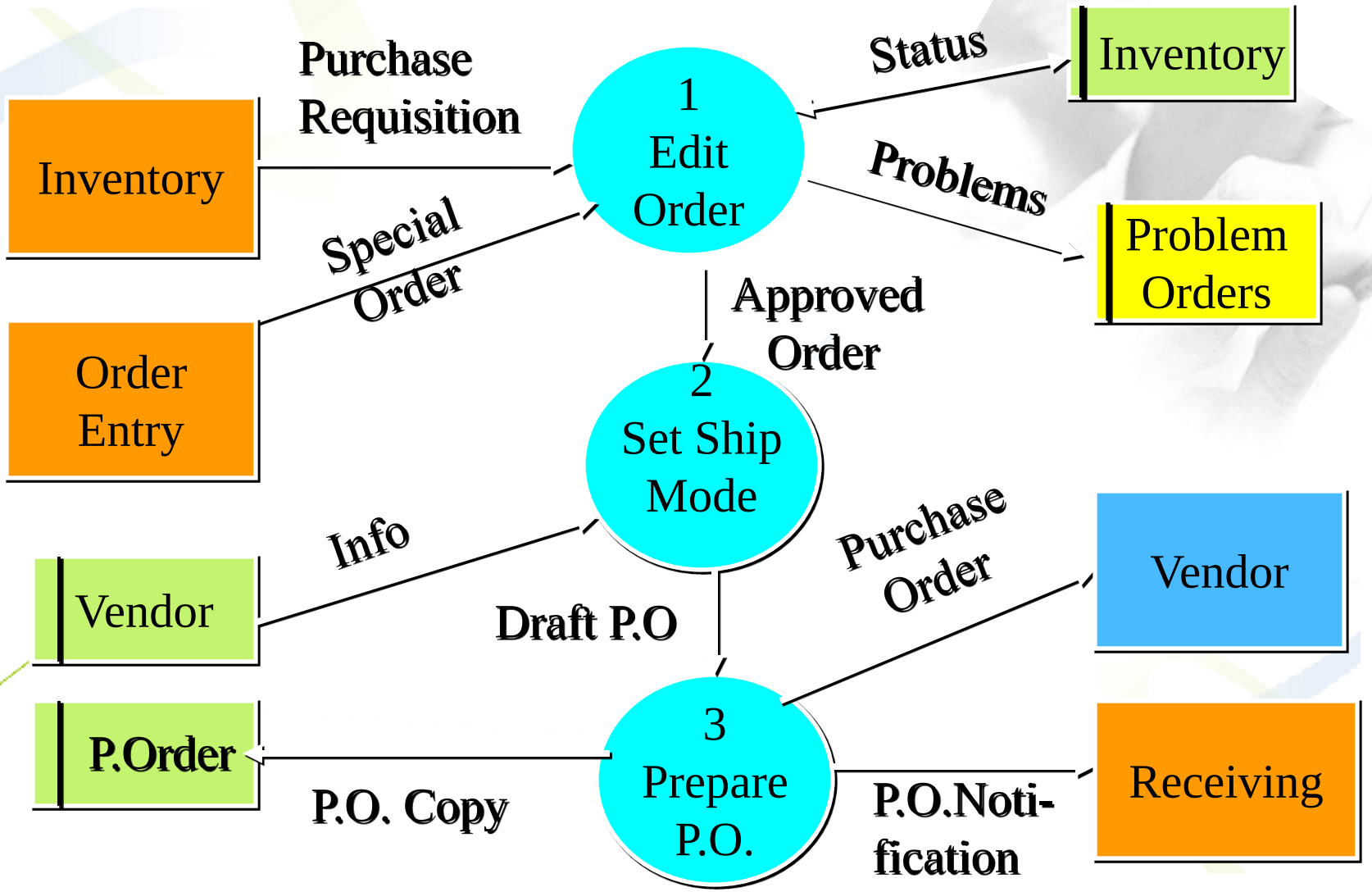
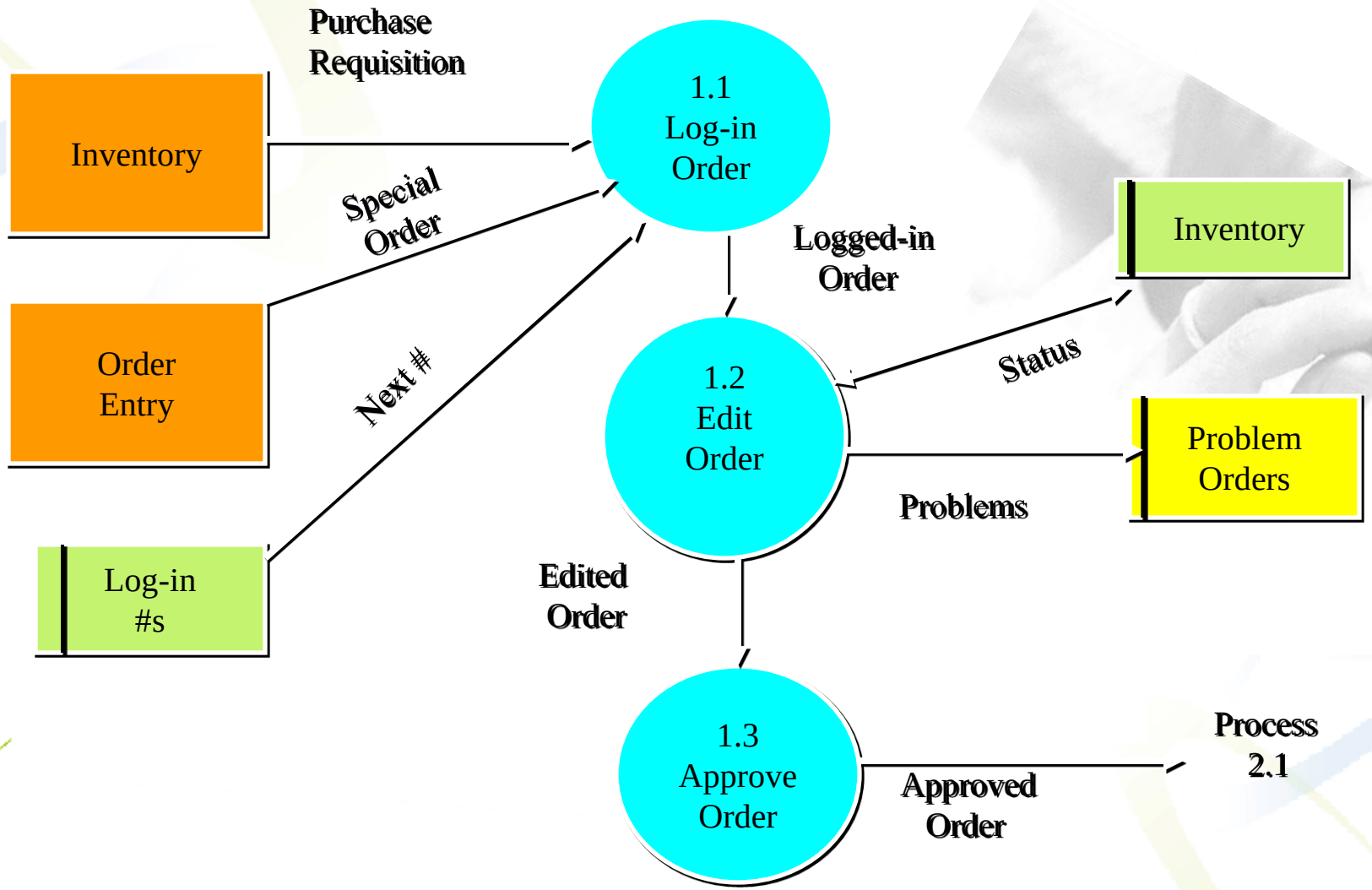
Ist Level Explosion



2nd and Succeeding Levels

- Must be consistent with parent DFD
  - Same external entities
  - Same data stores
  - Same data flows

2nd Level Explosion (Process 1)



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Part 3