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E-Commerce & Digital Marketing

Unit-IV

1. What is Electronic Data Interchange?
Explain types of EDI.

A) Electronic Data Interchange (EDI) is defined as the computer-to-computer exchange of formatted business transactions in a standard format. It is widely accepted as the replacement of paper-based purchase orders with electronic equivalent, i.e., EDI involves no paper, no human intervention and takes place in a matter of seconds. EDI requires network connection between the companies to exchange Business development.

Types of Business Systems in EDI:

I. Non-EDI System

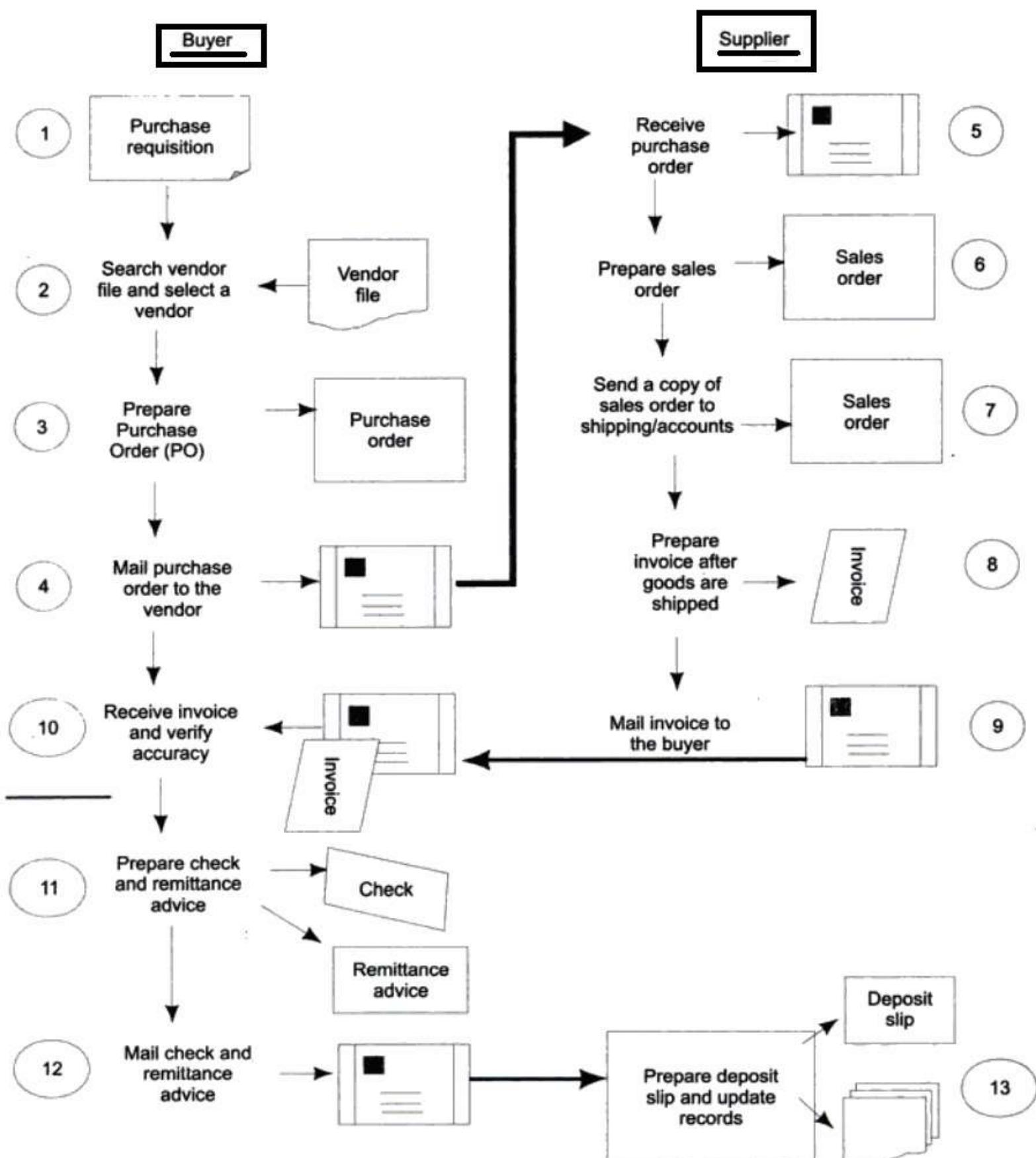
II. EDI system

a) Partially Integrated EDI System

b) Fully Integrated EDI system.

Non-EDI System:

The following diagram is an example of non-EDI system:



Workflow of a Purchase Order in a Non-EDI System

Steps in non-EDI:

- ① A purchase requisition is completed by the production planning department or any other department needing equipment or supplies. A purchasing agent then reviews the purchase requisition.
- ② The purchase agent then manually reviews the available vendors for price by combining product catalogues, price lists and calling vendors to inquire about inventory availability.
- ③ Once a vendor is selected, the purchasing agent completes the purchase order.
- ④ The purchase order is then mailed to the vendor.
- ⑤ Once the vendor/supplier receives the purchase order, a sales order processing clerk transcribes the necessary information into a Sales order.
- ⑥ A copy of Approved Sales order form is sent to the warehouse where the goods are pulled. If the goods are not available, they are placed on backorder which usually involves further clerical work.

- ⑧ An invoice is prepared and sent to the payment once the goods are shipped.
- ⑨ Prepared invoice is mailed to the customer/Buyer.
- ⑩ Customer receives the invoice and verifies its accuracy.
- ⑪ The customer's cash disbursement department prepares a cheque and remittance advice.
- ⑫ Cash disbursement department mails the cheque and remittance advice to vendor.
- ⑬ The Vendor's cash receipts department upon receipt of the cheque, prepares the deposit slip and the accounts receivable department updates the accounts receivable records.

The vendor may not have access to the funds for several days after the deposit has been made while the cheque is cleared by the bank.

Note: The entire non-EDI process requires the use of multiple clerks by both the Buyer and Supplier to complete the transaction. The entire process is time consuming and there is scope of lots of errors.

Partially Integrated EDI System:

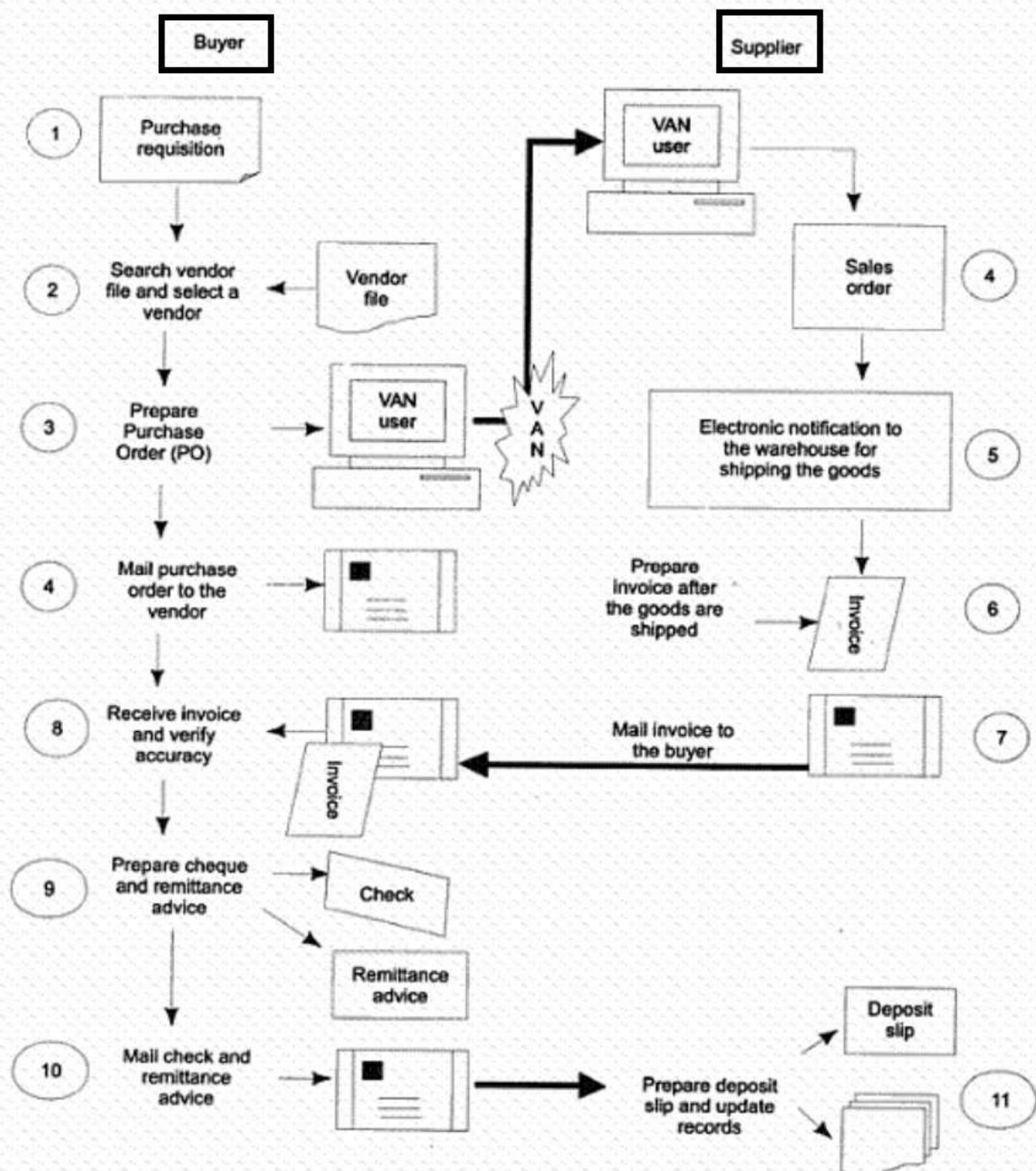
In a Partially Integrated EDI system, the process begins the same as in a non-EDI system.

Steps:

- ① A purchase requisition is completed by the production/purchasing department needing equipment or supplies. A purchasing agent then receives the purchase requisition.
- ② The purchasing agent then manually reviews the available vendors for price by combining product catalogues, price lists and calling vendors to inquire about inventory availability.
- ③ Once a vendor is selected, the partially integrated EDI system differs from the non-EDI system.

The purchasing agent doesn't manually complete the purchase order, but logs onto a computer system that displays a computerized purchase order form. The agent keys in the appropriate data and submits it. Because the purchasing agent doesn't manually fill out a form and then submit it to data processing, the chance of clerical data error is reduced.

Once the electronic purchase order is submitted, the data is transferred to a VAN and then channeled from there to the appropriate mailbox.



- (4) The vendor retrieves its order form through VAN and a sales order is automatically generated. A credit checking procedure is most likely conducted by the EDI system at this point.
- (5) The electronic system notifies the warehouse personnel to ship the goods from the warehouse.
- (6) An invoice is prepared and sent to the payment once the goods are shipped.
- (7) Prepared invoice is mailed to the customer/Buyer.
- (8) Customer receives the invoice and verifies its accuracy.
- (9) The customer's cash disbursement department prepares a cheque and remittance advice.
- (10) Cash disbursement department mails the cheque and remittance advice to vendor.
- (11) The vendor's cash receipts department upon the receipt of the cheque, prepares the deposit slip and the accounts receivable department updates the account receivable record.

Note: Once the goods are shipped, the rest of the process resembles non-EDI system for invoice processing. The time for approval of purchasing order may reduce by 3-7 days. The no. of required clerks will also reduced.

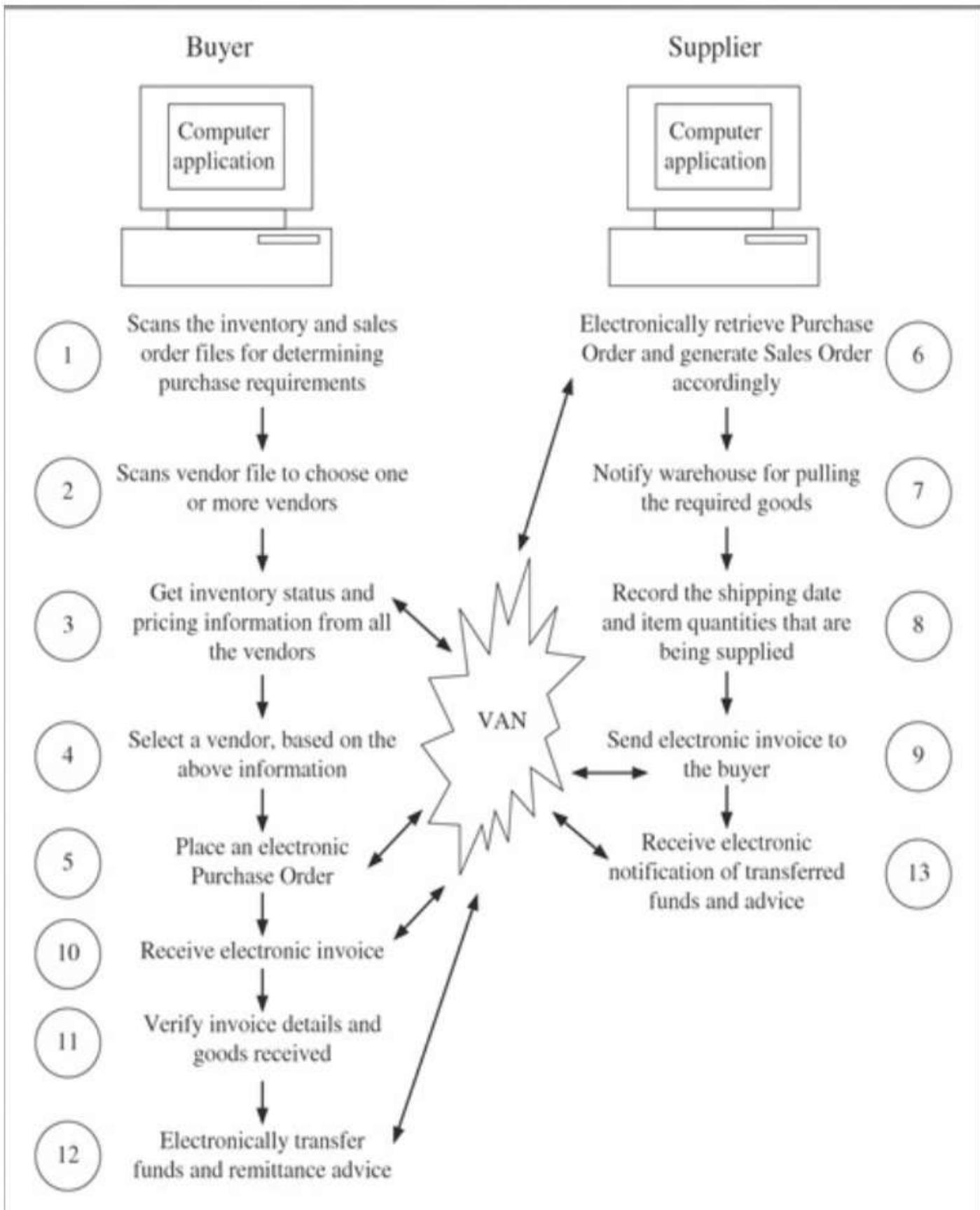
Fully Integrated EDI system:

A fully integrated EDI systems encompass electronic data sharing throughout all aspects of the purchasing and payments cycle.

The processing of actual payment and remittance advice is called Financial EDI. Every fully integrated EDI system includes Financial EDI which provides the firms with the best cost.

The fully integrated EDI system allows the purchaser's computer system to electronically check inventory levels and production schedules to determine whether the requested item in stock or when it is scheduled to be produced/available. EDI messages are sent automatically and are received by the recipient for automatic processing. At the end of the day, the effectiveness and success of EDI is measured by the degree of integration of EDI.

The following diagram describes the structure of Fully Integrated EDI.



Fully integrated EDI system