

MIS 5121: Business Process, ERP Systems & Controls
Week 6: *Order to Cash: Invoice, Payables,
Configuration Audit*

Control Failure: Skimming

- Background:

- ❖ Beverage company
- ❖ Controller became disillusioned with his job and employer
- ❖ Controller found skimming cash was 'simple' after accidentally receiving \$1,000 more in cash than on deposit slip. He pocketed the \$ vs. correcting the error

- Control Failures:

- ❖ Cash from customer payments, direct customer sales and vending machine collections came to his desk (Last person to see the \$\$ before bank deposit)
- ❖ No monitoring of cash receipt process. Used new deposit forms to remove cash from bank deposit -> his pocket
- ❖ Discrepancies between cost of sales and inventory not monitored
- ❖ What was missing: _____

- Results:

- ❖ 2 years -> \$475,000 in controller's pocket
- ❖ controller was fired for poor conduct (missing work, filing financial statements and tax returns late)
- ❖ Scheme uncovered when replacement temporary CPA found discrepancies
- ❖ Controller arrested

- Reference:

- ❖ Accounts Receivable Fraud [Link](#)



Control Failure: A/R Lapping



- Background:
 - ❖ Financial institution
 - ❖ Programmer needed to quickly pay back a company bridge loan of \$15,000 granted temporarily for moving / housing expenses as result of promotion and transfer
 - ❖ Had unrestricted access to customer accounts
 - ❖ Created fictitious account (elderly uncle's name)
 - ❖ Monthly would locate a customer account was large enough to handle a funds transfer of \$15,000. Realizing that a funds transfer would create a record on the customer's statement, the programmer simply removed the funds from the "ending balance" field on the statement itself
 - ❖ With monthly statement cycle – assumed he had 29 days to use the funds Created program to roll the \$15,000 through the ending balance field on other accounts on a predetermined schedule.
 - ❖ \$\$ bounced from account to account until he was able to repay.
 - ❖ Scheme worked so well he expanded and eventually the \$\$ 'loaned' exceeded \$150,000 and thousands of customer accounts.
- Control Failures:
 - ❖ Broad security privilege: Had unrestricted access to customer accounts
 - ❖ No inter-month reconciliation of customer accounts
- Results / Outcomes:
 - ❖ Programmer forgot there were 28 days in February
 - ❖ Many angry customer complaints from discrepancies in their February statements
 - ❖ Fraud was uncovered
- Reference:
 - ❖ Accounts Receivable Fraud [Link](#)



External Financial Reporting regulations

Other Reg's

Organization's Objectives & Policies

Balance Sheet

P & L

Notes

FDA etc.

Performance & Policies

Arise through

Must be observed / achieved in

Business Processes

Procurement

Production

Order to \$\$

Finance

IT

Quality

Logistics

HR

...

Contain

Assertions

- Completeness
- Existence, rights
- Accuracy
- Valuation
- Presentation

Risks

- Product quality
- Delivery (OTD)
- Unused capacity
- Excess Costs
- Lower Sales

Errors & Fraud

Minimized by

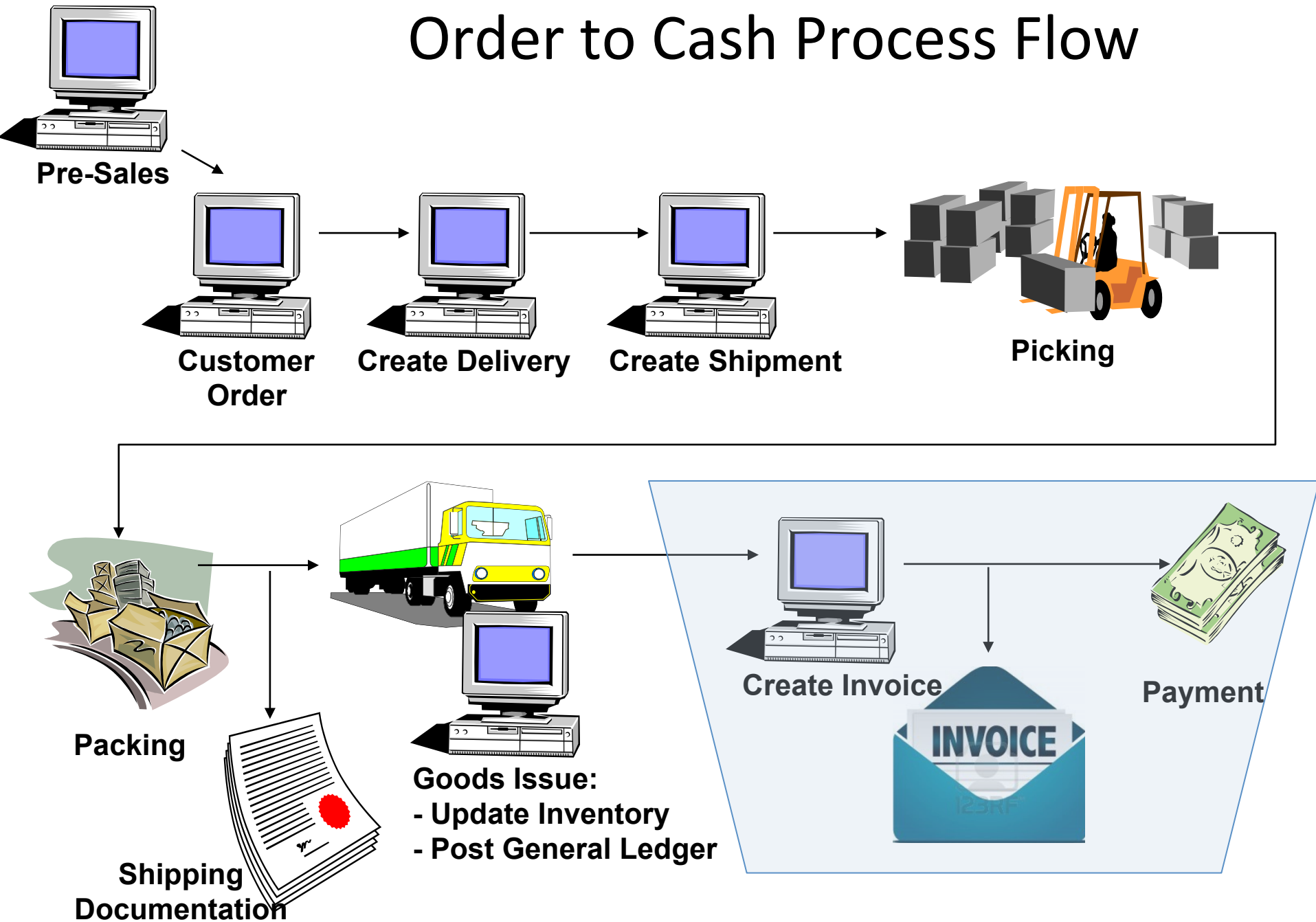
ISC framework in the ERP environment

- Entity level controls
- Automated application controls
- Manual and semi-automated business process controls
- Authorizations and access protection (confidentiality, integrity)
- IT General controls (change management, operation, security)
- Automated testing and monitoring of business processes, KPIs, etc.

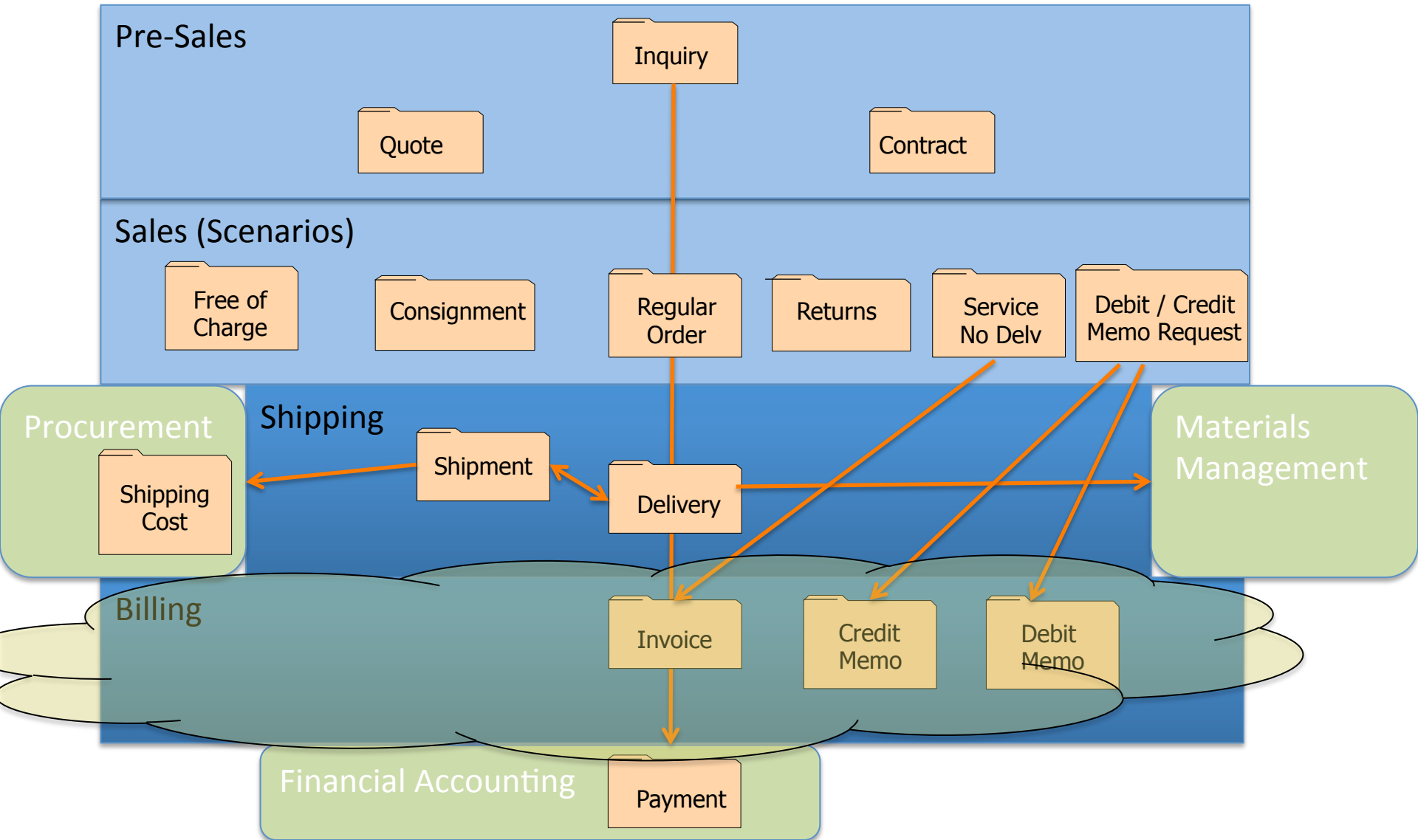
Business Process Controls

Order to Cash
(OTC, O2C)

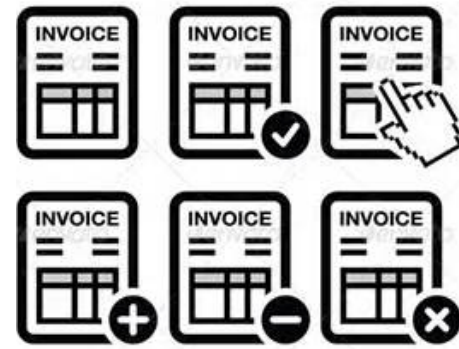
Order to Cash Process Flow



Order to Cash: Document Flow



Billing / Invoicing



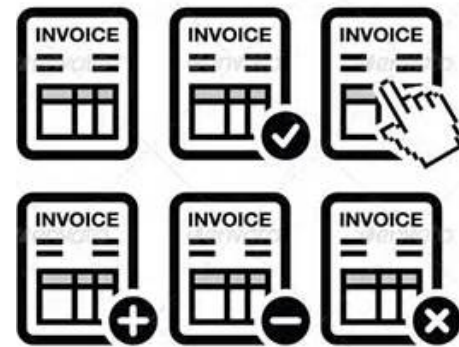
- Billing Functions

- Issuing invoices, credit notes, debit notes, etc.
- Calculating, settling rebates / commissions
- Transfer billing data to FI (revenue recognition)

- Billing Process

- Values copy from sales order, quantities from Delivery (if present)
- Commonly a small back-end / small accounting group function
- Created selectively or in batch (scheduled)
- Linked to delivery or sales order (config)
- Can combine several deliveries in one invoice (manual, calendars)
- Summary invoice
 - Multiple linked customers
 - Periodic (e.g. month-end) billing
 - Individual invoice documents created (sent to FI) but output delayed
- Invoice outputs in various forms (mail, e-mail, EDI, ...)

Billing / Invoicing



- Postings following (controlled by config):
 - Accounting document (revenue) FI
 - Customer account (accounts receivable) FI
 - Sales / Sales adjustment FI
 - Accruals (rebates / commissions) FI
 - Profitability analysis CO
- Updates these documents:
 - Delivery (VL03N)
 - Linked order document (VA03)
- Blocked Billing Documents
 - Manual blocks (Order, Delivery) (e.g. value not defined)
 - Accounting block (incompletion)
 - If billing document is blocked -> no revenue recognized
 - Blocked documents must be explicitly released

Sales Adjustments



- Discounts / surcharges:
 - From pricing conditions FI
- Rebates:
 - Special Discounts paid retroactively to a customer
 - Rebate agreement defines criteria (e.g. material, material group, etc.) & calculation
 - All billing documents when recreated can check for applicable rebate(s) and post calculated accruals
 - Agreement is 'settled' when credit memo is issued for accumulated rebate total
- Commissions
 - Payment / remuneration to an agent (sales person for hire)
 - Internal and External
 - Commission agreement defines criteria (e.g. material, customer, etc.) & calculation
 - All billing documents when recreated can check for applicable commission(s) and post calculated accruals
 - Commission agreement is periodically 'settled'. Payment via vendor payment
 - Typically original invoice must be paid by customer before commission payment

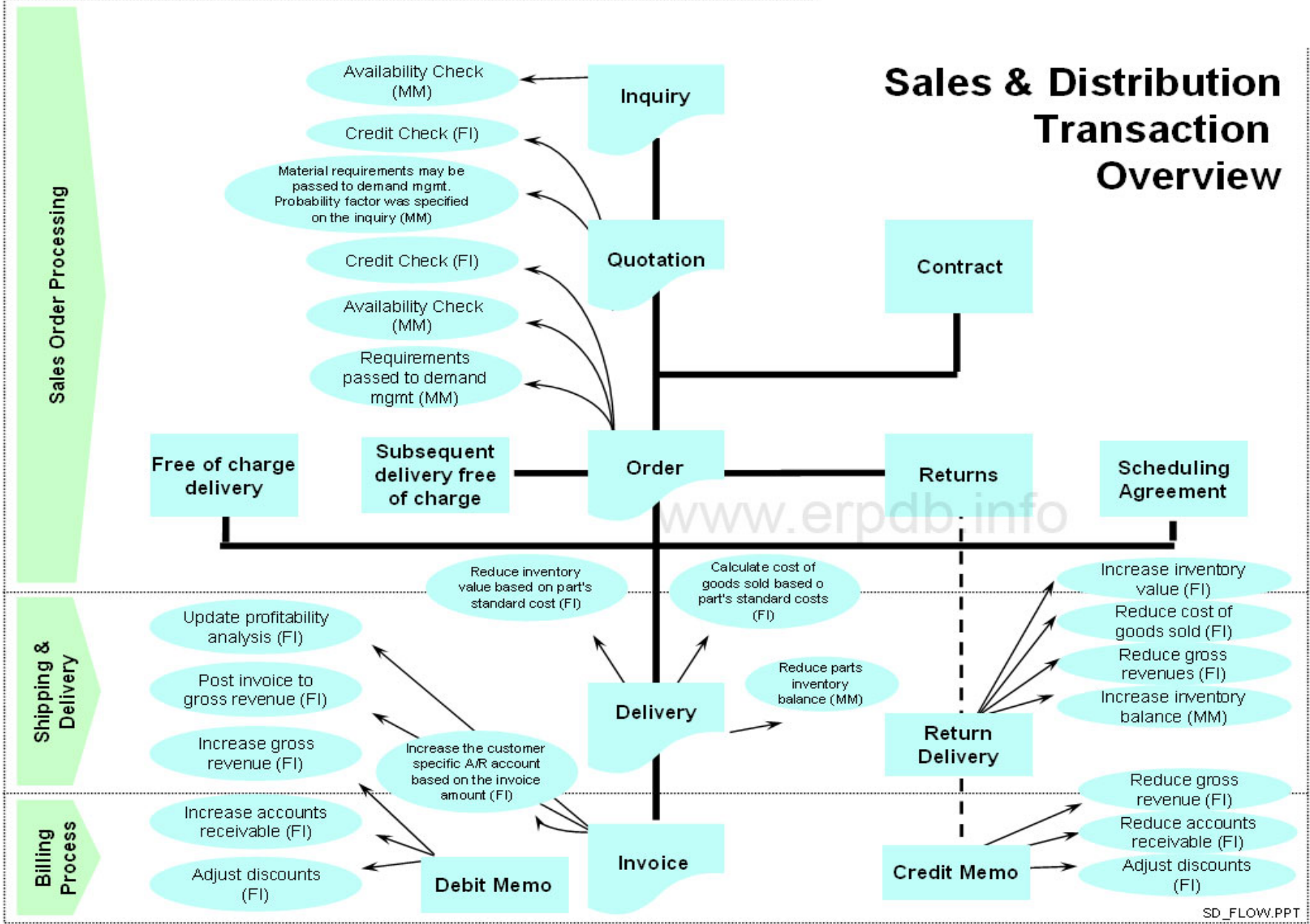
Customer Payments

- Payment Process
 - Receive payments (Cash, Checks, direct bank transfers, etc.)
 - Record amounts in cashbook
 - Matching receipts to invoices in the sales ledger (reconciliation)
 - Some can be automated (esp. when customer sends document reference information)
- Postings
 - Cash
 - Accounts Receivable (customer ledger)
- Past Dues
 - Customer Statements
 - Dunning (Output to customer)
 - Collections process



**“If an invoice is due in 30 days, we pay it in 60 days.
If it’s due in 60 days, we pay it in 90 days. If it’s
due in 90 days, then they probably don’t
need the money anyway.”**

Sales & Distribution Transaction Overview



Class Exercise

- Small groups – Assigned sub-process
 1. Invoicing
 2. Adjustments (rebates / commissions)
 3. Payment
- Assignment:
 - List 4 Internal Control Risks that might exist in assigned sub-process
 - For 1 of the risks – define a control to minimize the risk
- 8 Minutes

Report Back



Order to Cash (b) : Common Risks



Invoicing / Billing

- Manipulation of names and address on vouchers / refund
- Records lost / destroyed
- Wrong invoices / duplicate invoices
- Revenue of various types of sales improperly categorized
- Sales and cost of sales are recognized during an inappropriate time period.
- Complex sales transactions are often difficult to determine when a sale actually takes place. For example, title passes only when some contingent situations are met, or the customer may have an extended period to return the goods.
Specifically:
 - What is the point in time when revenue should be recognized
 - Impact of unusual terms and whether title has passed to the customer
 - How to assure all goods recorded as sales have been shipped and were new goods
 - Treating sales transactions made with recourse or that have an abnormal or unpredictable amount of returns
- Unauthorized returns / adjustments

Order to Cash (b) : Common Controls



Invoicing / Billing

- Automatic invoicing (once PGI occurs)
- Backlog of invoicing monitored and controlled
- Unusual or sensitive documents are subject to further management review prior to posting. Only valid cash payments are made
- Policy to define and procedures at closing to assure revenue recognition (posting) timing corresponds to when title and risk / reward of ownership transfer to customer
- Return policy with crisp guidelines and decision criteria (written, taught, monitored)
- Use pre-numbered invoicing documents with subsequent accounting of all documents
- Use of pre-numbered return documents with subsequent account of all documents
- Period reconciliation of shipping and invoicing records
- Review all changes made to invoice / billing documents (authorized, not material)
- Internal and regulatory audits of tax collections

Order to Cash (b) : Common Risks



Customer Payment

- Not All cash payments that occurred are recorded
- Cash payments /refunds are in-correctly recorded in the ledger
- Cash payments / refunds are executed without valid authorization
- Not all cash receipts are recorded and / or not in correct amounts
- Cash receipts not recorded to correct receivables accounts and to the general ledger
- Cash receipts are recorded in the incorrect accounting period
- Recognition of revenue on shipments that never occurred
- Hidden “side letters” giving customers an irrevocable right to return the product
- Recording consignment sales as final sales
- Early recognition of sales that occurred after the end of the fiscal period
- Creation of fictitious invoices
- Sales of receivables made with recourse but recorded as sales of the receivables rather than as financing transactions
- Receivables pledged as collateral against specific loans. Disclosures of such restrictions are required.
- Receivables incorrectly classified as current when the likelihood of collection during the next year is low
- Collection of receivables contingent on specific events that cannot currently be estimated
- Payment is not required until the purchaser sells the product to its end customers.

Order to Cash (b) : Common Controls

Customer Payment

- Monthly statements sent to customers. Group independent of those recording transactions receives and follows up on complaints
- Payment Policy and procedures (Written, taught, monitored)
- Reconciliation of bank accounts with internal cash accounts and A/R
- Monitor and control aged receivables
- Write-off of receivables handled: segregated from operations, separate authorization, document trail supporting decisions

General / Other

- Segregation of duties
- Limiting access to the files to authorized individuals
- Review / validate handling of Complex, large (\$\$), high impact transactions



Examples: Improper Revenue Recognition

- Coca-Cola charged with coercing its largest distributors to accept delivery of more syrup than they needed at the end of each quarter. Inflated sales by about \$10 million/ year
- Gateway recorded revenue for each free subscription to AOL services that was given with each computer sale, thus overstating pre-tax income by over \$450 million.
- Kmart improperly included as revenue an American Greetings Corp \$42.3 million payment that was subject to repayment under certain circumstances (should not be fully booked)
- Xerox improperly accelerated \$6 billion revenue from long-term office equipment leases
- Qwest immediately recognized long-term contract revenue, vs. the 18-24 month contract period thus inflating revenue by \$144 million in 2000–2001.
- Quest inflated revenue (\$950 million) by swapping network capacity with Global Crossing.
- Rite-Aid sold 189 stores to J.C. Penney. Instead of booking \$82.5 million one-time gain, put amount into internal reserve account and used it to absorb future operating expenses.
- Bristol-Myers inflated 2001 revenues up to \$1 billion via wholesaler sales incentives to take delivery of the products with intent to sell the following year (channel stuffing).
- Lucent Technologies improperly booked \$452 million in revenue (2000) via products sent to distribution partners that were never actually sold to end customers (channel stuffing).
- Charter Communications (cable company) added \$17 million to revenue (2000) via phony ad sales deal with unnamed set-top decoder maker. Maker tack \$20 onto invoice price of each box. Charter held cash as an ad sale. Net income not affected but revenue increased.

Reading Assignment Questions:

- The book noted that while sending dunning notice, customer relationship should be actively managed. Is there a limit of sending dunning notices (e.g. if five notices have been sent, but the customer still doesn't make the payment, should the company end relationship with this customer)?
- Returns & credit memos- how is communication handled if there have been a great amount of returns for items sold in a month that sales numbers have already gone out?
- What is dunning?

Reference

- [Checklist](#): Standards of Internal Control: Invoice processing (IOFM)
- [Thomson Learning](#): Auditing Revenue Chapter

Real World Control Example

Configuration Control (Order to Cash)



Control Definition Outline

- **Reference #:** OCRW-608
- **Control Activity:** Tolerance groups have been appropriately configured inline with managements intentions.

- **Process** Order to Cash
- **Sub-Process** Cash Application
- **Location** Headquarters
- **Frequency:** **Used:** Z: Multiple x/day
Review: A: Annual
- **Automated: vs. Manual:** Automated
- **Control type:** P: Preventative

- **Control Owner:** Order to Cash Business
Process Architect



Configuration Review Procedure

- Transaction: SPRO (SAP Reference IMG)
 - Financial Accounting (New) > Accounts Receivable and Accounts Payable > Business transactions > Open item clearing > Clearing Differences > Define Tolerances for Customers/Vendors
- Click on Company Codes under review
- Ensure tolerance settings are appropriate

- Conclusion: _____



Configuration Review Procedure (Alternate)

- Download related configuration table.
Transaction: SE16N
 - Table: T043G (Tolerances for Groups of Customers / Vendors)
- Download table
- Review active entries and ensure tolerance settings are appropriate
- Conclusion: _____



Break Time



Start Recording





Order to Cash Exercise



- Primary learning objectives are:
 - Experience the steps in a typical sales transaction
 - See how an ERP system handles a typical sales transaction
 - Work through the procedures involved in a test of transactions
 - Look at a special feature of the sales and distribution (SD) module of SAP
 - See the integration between Sales and Distribution (SD) and financial accounting (FI) modules of SAP



Exercise 2: Order to Cash



- Agenda
 - Last Class (*Feb 8*): Steps 1 – 8
 - This Class (*Feb 15*): Steps 9 – 15
 - Next Class (*Feb 22*): Steps 16 – 23
 - *Due Feb 25 11:59 PM*: Assignment Submission

Exercise 2: Order to Cash



- Task 16 – Create an Invoice for the Delivery
 - Menu: **Logistics** ▶ **Sales and Distribution** ▶ **Billing** ▶ **Billing Document** ▶ **Create**
 - Transaction: **VF01**
- Task 17 - Check Status of Various Accounts
 - See details of Task 5
- Task 18 – Display the Document Flow for the Sales Order
 - Within transaction use menu: **Environment** ▶ **Display Document Flow**
 - Transaction: **VA03**

Exercise 2: Order to Cash



- Task 19 – Locate the Accounting Document Number
 - Menu: ***Logistics*** ▶ ***Sales and Distribution*** ▶ ***Billing*** ▶ ***Billing Document*** ▶ ***Display***
 - Transaction: ***VF03***
- Task 20 – Post the Customer’s Payment on Account
 - Menu: ***Accounting*** ▶ ***Financial Accounting*** ▶ ***Accounts Receivable*** ▶ ***Document Entry*** ▶ ***Incoming Payment***
 - Transaction: ***F-28***



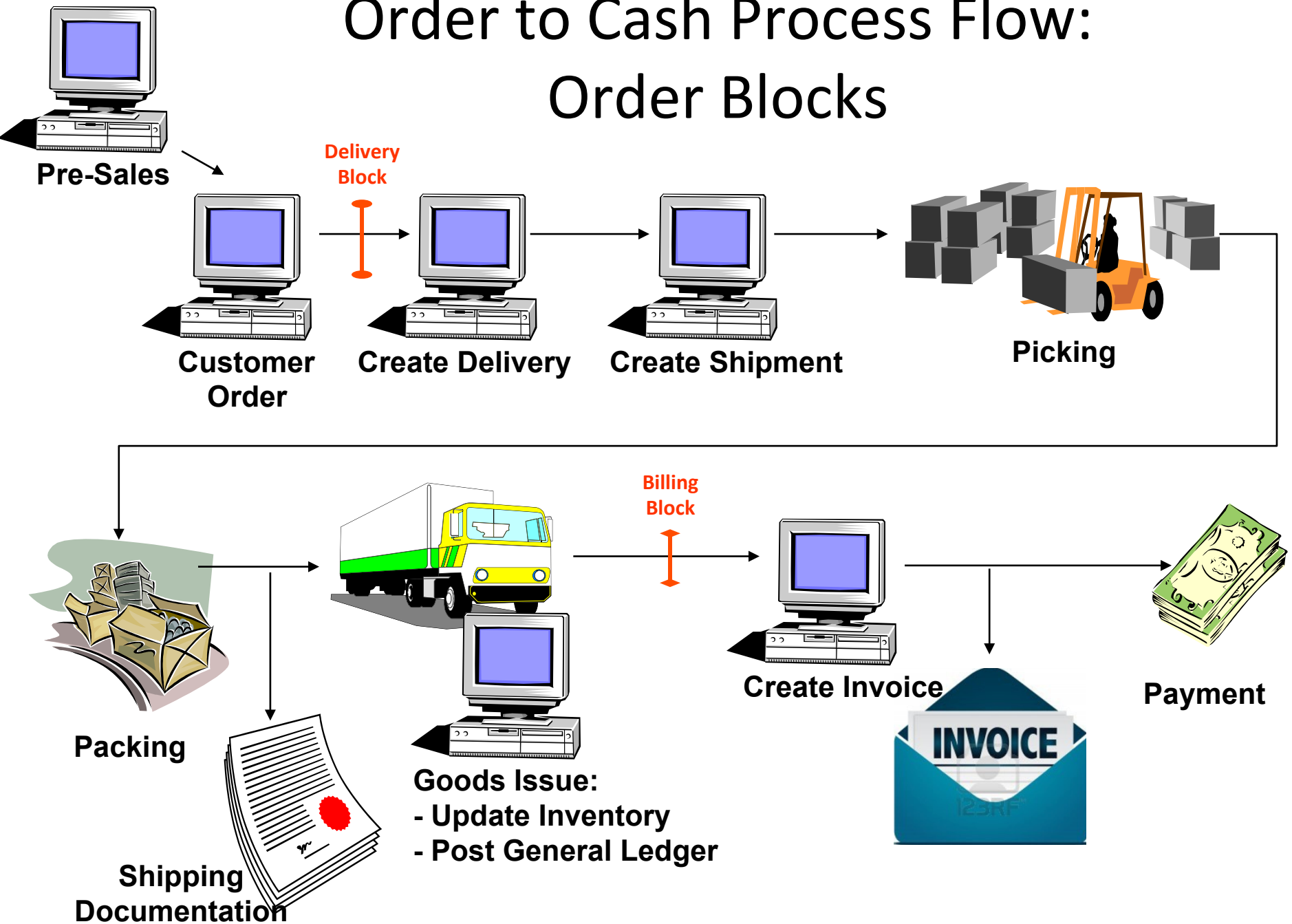
Exercise 2: Order to Cash



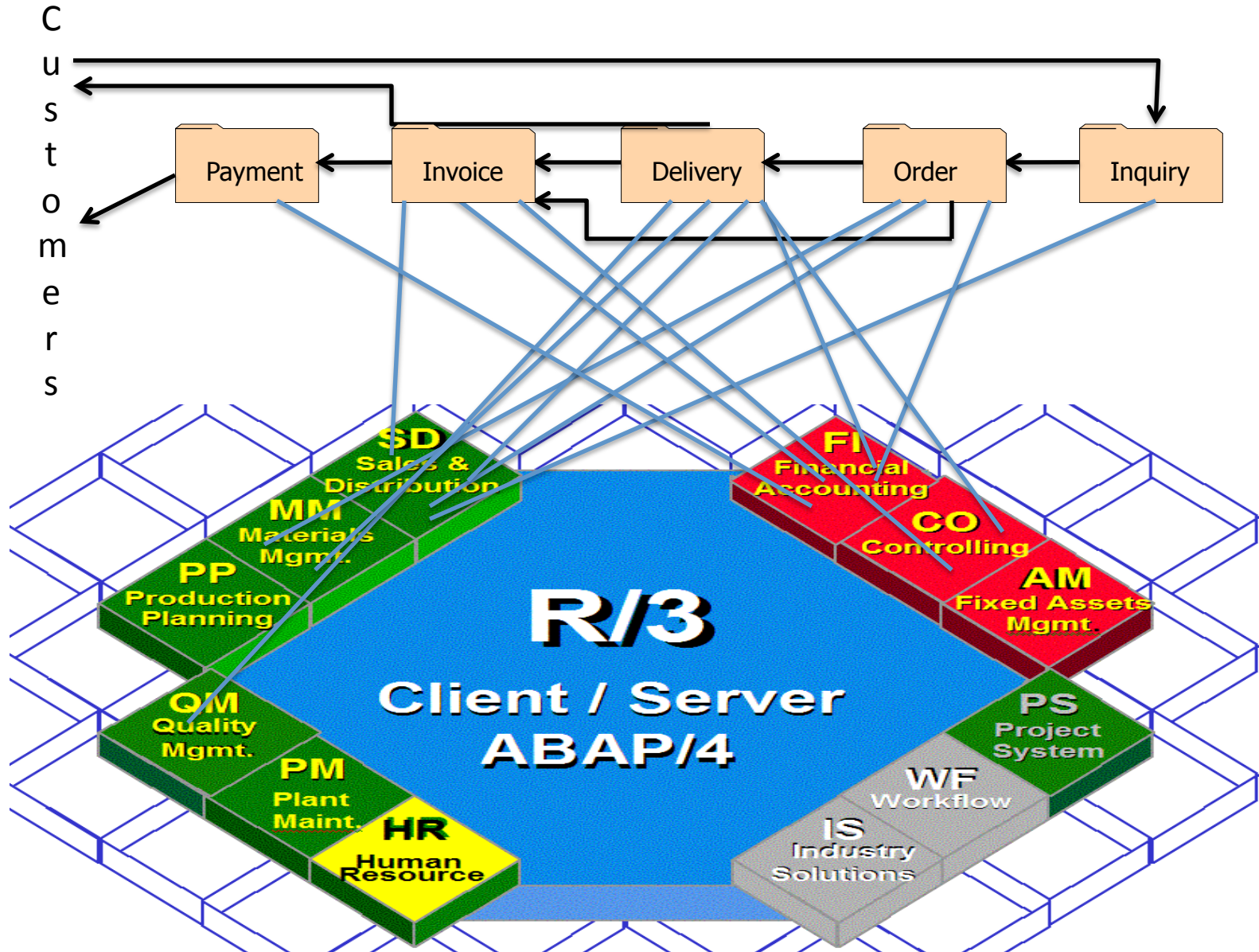
- Task 21 - Check Status of Various Accounts
 - See details of Task 5
- Task 22 – Display the Document Flow for the Sales Order
 - Within transaction use menu: *Environment* ► *Display Document Flow*
 - Transaction: **VA03**
- Task 23 – Write Down the Journal Entries the System Made
 - Non-SAP Task

Extra Slides

Order to Cash Process Flow: Order Blocks



Order to Cash Functions in SAP



Order to Cash Functions in SAP

Task	SD	MM	QM	FI	CO
Inquiry	<input checked="" type="checkbox"/>				
Order	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Delivery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Invoice	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Payment				<input checked="" type="checkbox"/>	

Exercise 2: Order to Cash



- Task 1 – Extend the Material Master Record for Sales
 - Menu: *Logistics* ▶ *Materials Management* ▶ *Material Master* ▶ *Material* ▶ *Create (Special)* ▶ *Trading Goods*
 - Transaction: **MMH1**
- Task 2 – Extend the Material Master Record for Sales
 - Menu: *Logistics* ▶ *Sales and Distribution* ▶ *Master Data* ▶ *Business Partners* ▶ *Customer* ▶ *Create* ▶ *Complete*
 - Transaction: **XD01**
- Task 3 – Set up Credit Limits for the Customer
 - Menu: *Logistics* ▶ *Sales and Distribution* ▶ *Credit Management* ▶ *Master Data* ▶ *Change*
 - Transaction: **FD32**



Exercise 2: Order to Cash



- Task 4 – Check Inventory Availability
 - Quantity:
 - Transaction: **MMBE**
 - Value:
 - Menu: *Accounting* ▶ *Financial Accounting* ▶ *General Ledger* ▶ *Account* ▶ *Display Balances*
 - Transaction: **FS10N or FAGLB03**



Exercise 2: Order to Cash



- Task 5 - Check Status of Various Accounts
 - Check Inventory: MM Inventory Quantity
Transaction: **MMBE** (*Stock Overview*)
 - Check Account Values: GL Inventory, GL Cash, Sales Revenue, Cost of Goods Sold (COGS), GL A/Receivable :
Transaction: **S_ALR_87012291** (*Line Item Journal*)
 - Check A/P Vendor sub-ledger:
Transaction: **FBL5N** (*Customer line item display*)



Exercise 2: Order to Cash



- Task 6 – Create a Sales Order
 - Menu: *Logistics* ▶ *Sales and Distribution* ▶ *Sales* ▶ *Order* ▶ *Create*
 - Transaction: **VA01**
- Task 7 – Display the Sales Order
 - Menu: *Logistics* ▶ *Sales and Distribution* ▶ *Sales* ▶ *Order* ▶ *Display*
 - Transaction: **VA03**
- Task 8 – Display the Document Flow for the Sales Order
 - Within transaction use menu: *Environment* ▶ *Display Document Flow*
 - Transaction: **VA03**
- Task 9 - Check Status of Various Accounts
 - See details of Task 5

Exercise 2: Order to Cash



- Task 10 – Create the Delivery for the Sales Order
 - Menu: *Logistics* ▶ *Sales and Distribution* ▶ *Shipping & Transportation* ▶ *Outbound Delivery* ▶ *Create* ▶ *Single Document* ▶ *With Reference to Sales Order*
 - Transaction: **VL01N**
- Task 11 - Check Status of Various Accounts
 - See details of Task 5
- Task 12 – Display the Document Flow for the Sales Order
 - Within transaction use menu: *Environment* ▶ *Display Document Flow*
 - Transaction: **VA03**

Exercise 2: Order to Cash



- Task 13 – Post the Goods Issue
 - Menu: *Logistics* ▶ *Sales and Distribution* ▶ *Shipping & Transportation* ▶ *Outbound Delivery* ▶ *Change* ▶ *Single Document (VL02N)*
 - Transaction: **VL02N**
- Task 14 - Check Status of Various Accounts
 - See details of Task 5
- Task 15 – Display the Document Flow for the Sales Order
 - Within transaction use menu: *Environment* ▶ *Display Document Flow*
 - Transaction: **VA03**