MIS 5121: Enterprise Resource Planning Systems
Week 2: Business Process, Assertions, HR Module & Security
Introductions:

All: Please Prepare a Name Card

New Students:

– Name

– Why in this course

– Unique experience, skills you bring to the class
Control Failure: WorldCom

• **Background:**
  - American communications – esp. discount Long Distance service
  - Rapidly grew by acquisition – largest being MCI (challenging AT&T)
  - CEO Bernard Ebbers very wealthy from stock price increases & company loans for personal investments (Canada ranch, timberlands, shipyard)
  - ~ 2000 telecom industry was declining
  - Failed merger with Sprint

• **Control Failures: mid-1999 thru 2002**
  - Booked ‘line costs’ (interconnection expenses with other telecom companies) as capital $$ vs. expense
  - Inflated revenue with bogus accounting entries from ‘corporate unallocated revenue accounts’
  - Disguised declining earnings
Control Failure: WorldCom

Results / Outcomes:
- Internal auditors secretly met and found $3.8 B in fraud, assets inflated by ~ $11 B
- Arthur Anderson withdrew audit opinion for 2001
- Company went bankrupt in 2002 (largest at time – eclipsed by Lehman Bros)
  - Estimated loss of $180B shareholder value
  - Layoff of 5,100 employees initially; 30,000 eventually
- Many executives indicted – some sentenced to prison
- Former directors settled class-action suit ($18 M paid by directors themselves
- Company reorganized as MCI – now absorbed into Verizon (2005)
- Inspiration for ‘Fun with Dick and Jane’ movie remake

References / Links:
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.
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.
Assertion

Definition

‘a confident and forceful statement of fact or belief’

Oxford Dictionaries

In Auditing: ‘what management claims’
Financial Statements

Example:
## Consolidated Statement of Activities

**Temple University**  
*Of The Commonwealth System of Higher Education*  
**Consolidated Statement of Activities**  
*For the Year Ended June 30, 2014*  
*(in thousands)*

### Revenues:

<table>
<thead>
<tr>
<th>Description</th>
<th>Unrestricted Net Assets</th>
<th>Temporarily Restricted Net Assets</th>
<th>Permanently Restricted Net Assets</th>
<th>Total Net Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and fees (net of discounts of $90,499)</td>
<td>$672,914</td>
<td></td>
<td></td>
<td>$672,914</td>
</tr>
<tr>
<td>Commonwealth of Pennsylvania appropriation</td>
<td>126,624</td>
<td></td>
<td></td>
<td>126,624</td>
</tr>
<tr>
<td>Federal grants and contracts</td>
<td>123,713</td>
<td></td>
<td></td>
<td>123,713</td>
</tr>
<tr>
<td>Commonwealth of Pennsylvania grants and contracts</td>
<td>12,056</td>
<td></td>
<td></td>
<td>12,056</td>
</tr>
<tr>
<td>Local grants and contracts</td>
<td>3,418</td>
<td></td>
<td></td>
<td>3,418</td>
</tr>
<tr>
<td>Private grants and contracts</td>
<td>34,761</td>
<td></td>
<td></td>
<td>34,761</td>
</tr>
<tr>
<td>Contributions for operations and endowments</td>
<td>23,737</td>
<td>$21,114</td>
<td>$15,337</td>
<td>60,188</td>
</tr>
<tr>
<td>Investment return</td>
<td>37,922</td>
<td>2,634</td>
<td>367</td>
<td>40,923</td>
</tr>
<tr>
<td>Sales of educational activities</td>
<td>8,649</td>
<td></td>
<td></td>
<td>8,649</td>
</tr>
<tr>
<td>Auxiliary enterprises</td>
<td>95,133</td>
<td></td>
<td></td>
<td>95,133</td>
</tr>
<tr>
<td>Patient care activities (net of bad debt expense of $47,318)</td>
<td>1,497,846</td>
<td></td>
<td></td>
<td>1,497,846</td>
</tr>
<tr>
<td>Other sources</td>
<td>47,698</td>
<td></td>
<td></td>
<td>47,698</td>
</tr>
<tr>
<td>Net assets released from restrictions</td>
<td>17,036</td>
<td>(17,036)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td>2,701,507</td>
<td>6,712</td>
<td>15,704</td>
<td>2,723,923</td>
</tr>
</tbody>
</table>

### Expenses:

#### Educational and general:

<table>
<thead>
<tr>
<th>Description</th>
<th>Unrestricted Net Assets</th>
<th>Temporarily Restricted Net Assets</th>
<th>Permanently Restricted Net Assets</th>
<th>Total Net Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>433,311</td>
<td></td>
<td></td>
<td>433,311</td>
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<tr>
<td>Research</td>
<td>166,235</td>
<td></td>
<td></td>
<td>166,235</td>
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<tr>
<td>Public service</td>
<td>16,433</td>
<td></td>
<td></td>
<td>16,433</td>
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<tr>
<td>Academic support</td>
<td>156,850</td>
<td></td>
<td></td>
<td>156,850</td>
</tr>
<tr>
<td>Student services</td>
<td>76,731</td>
<td></td>
<td></td>
<td>76,731</td>
</tr>
<tr>
<td>Institutional support</td>
<td>126,527</td>
<td></td>
<td></td>
<td>126,527</td>
</tr>
<tr>
<td>Student aid</td>
<td>12,016</td>
<td></td>
<td></td>
<td>12,016</td>
</tr>
<tr>
<td><strong>Total educational and general</strong></td>
<td>988,103</td>
<td>0</td>
<td>0</td>
<td>988,103</td>
</tr>
</tbody>
</table>

#### Auxiliary enterprises

<table>
<thead>
<tr>
<th>Description</th>
<th>Unrestricted Net Assets</th>
<th>Temporarily Restricted Net Assets</th>
<th>Permanently Restricted Net Assets</th>
<th>Total Net Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>118,558</td>
<td>0</td>
<td>0</td>
<td>118,558</td>
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</table>

#### Patient care activities

<table>
<thead>
<tr>
<th>Description</th>
<th>Unrestricted Net Assets</th>
<th>Temporarily Restricted Net Assets</th>
<th>Permanently Restricted Net Assets</th>
<th>Total Net Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,580,321</td>
<td>0</td>
<td>0</td>
<td>1,580,321</td>
</tr>
</tbody>
</table>

**Total expenses**  
*2,686,982*  
*0*  
*0*  
*2,686,982*
Management Assertions

‘a confident statement of fact’ if:

- Occurrence
- Completeness
- Accuracy
- Timing
- Classification
- Summarization / Presentation
- Existence
- Rights (Ownership)
- Valuation

Income Statement
all
Balance Sheet
Balance Sheet
Balance Sheet
Management Assertions

- **Occurrence:**
  - Recorded transactions exist
  - Transactions actually occurred during the period

- **Existence:**
  - Evidence the assets, liabilities and equity balances exist (have real world counterpart)
  - Exist at a given date

- **Timing (cutoff):**
  - Transactions recorded in proper accounting period
  - Transactions recorded with correct dates

- **Completeness:**
  - Existing transactions are recorded
  - All transaction that should be included are in fact included
SAP Design for ‘Completeness’

- In SAP, there are very few delete options:

- **Implication**: Don’t save if things don’t look 100% correct! Exit the transaction and start over

- **Implication**: Once transaction included, always included
Management Assertions

- **Accuracy:**
  - Transactions have been recorded with correct amounts
  - Transactions recorded in the appropriate accounts

- **Valuation:**
  - Included at appropriate amounts
  - Value adjustments are properly determined and recorded

- **Rights (Ownership):**
  - Entity holds or controls rights of ownership to assets
  - Liabilities faithfully represent entity’s obligations
  - Rights exist as of given date

- **Summarization / Presentation:**
  - Transactions are included in the master files
  - Transactions correctly summarized
Management Assertions

Taxonomy for class

• Occurrence / Existence (timing)
• Completeness
• Accuracy / Valuation
• Rights (Ownership)
• Summarization / Presentation
WorldCom: How the Fraud took place

- Operating Expenses to Assets
  - CFO’s directions affected the income statement:

  Revenues xxx (no change)
  COGS xxx (no change)
  Operating Expenses:
    Fees paid to lease other companies phone networks: xxx (Huge Decrease)
    Computer expenses: xxx (Huge Decrease)
    NET INCOME xxx (Huge Increase)

= HAPPY INVESTORS
How the Fraud took place (con’t)

• Operating Expenses into Assets
  – WorldCom’s journal entry for $500 million in computer expenses:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Assets</td>
<td>500 million</td>
</tr>
<tr>
<td>Cash</td>
<td>500 million</td>
</tr>
</tbody>
</table>

Documents to support entry never found!

• Huge losses turned into enormous profits.
  – $1.38 billion in net income in 2001

• Inflated the company’s value in its assets

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The existence of controls imply the existence of assertions.
Integration of:
- Business Organization
- Business Process
- ERP / SAP Functions
Global Bike Organization

Marketing / Sales
- Customer Service

Supply Chain

Warehouse Distribution
Conversion
Procurement

Finance / HR
- Accounts Receivable
- Accounts Payable
Business Process

Definition

‘A series of logically related activities / tasks performed together to produce a defined set of results.’
Procurement Process

1. Determination of reqmts
2. Source determination
3. Vendor selection
4. PO processing
5. PO monitoring
6. Purchase order
7. Invoice verification
8. Payment processing

- Invoice
- Purch. ord.
Procurement Functions in SAP
## Procurement Functions in SAP

<table>
<thead>
<tr>
<th>Task</th>
<th>SD</th>
<th>MM</th>
<th>QM</th>
<th>FI</th>
<th>CO</th>
<th>PP</th>
<th>PM</th>
<th>PS</th>
<th>WF</th>
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</thead>
<tbody>
<tr>
<td>Requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Vendor / Sourcing</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Order</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Goods Receipt</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invoice Verify</td>
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<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Order to Cash Process

Fitter Snacker’s Sales Process

Sales
- Price quote
- Sales order

Warehouse
- Pick, pack, and ship

Receiving
- Returns

Accounting
- Invoice
- Payment
Order to Cash at GBI

- Marketing / Sales
  - Customer Service
  - Order
  - Inquiry

- Supply Chain
  - Delivery
  - Invoice

- Warehouse Distribution

- Conversion

- Procurement

- Finance / HR
  - Billing
  - Accounts Receivable
  - Payment
  - Accounts Payable

- Suppliers
Order to Cash Functions in SAP
## Order to Cash Functions in SAP

<table>
<thead>
<tr>
<th>Task</th>
<th>SD</th>
<th>MM</th>
<th>QM</th>
<th>FI</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquiry</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Delivery</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Invoice</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Payment</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>
Break Time
Human Resources Module

- HR Module Components
- Cross-Application Components
- HR Security
HR Module Components

Financials

Internet Integration

Employee Self-Service

Office

Logistics

Personnel Management

Personnel Development

Information Systems

Travel Management

Payroll

Time Management

Organization Management
Module: Organizational Management & Workforce Planning

- Defines organizational structure (units, divisions, positions, etc.)
- Base for personnel planning and development
  - Analyze, forecast, plan and optimize workforce
- Allows planning with actual and proposed personnel scenarios
**Module: Recruitment**

• Support the entire recruitment process
  - Receipt of application (e.g. via web access)
  - Issuance of recruitment requests
  - Selection process of applicant
  - Applicant pool administration
  - Notification to applicants

• Use to implement an effective – and largely automated – recruitment strategy
Module: Personnel Administration (PA)

- Perform essential personnel administration (Hire to Fire) tasks such as:
  - Hiring employees
  - Performing organizational reassignments
  - Salary adjustments
  - Terminations
Module: Compensation Management

- Empowers managers to offer competitive and motivating remuneration
  - Fixed pay
  - Variable pay / Incentive wages (e.g. commissions)
  - Merit increases
  - Promotion

- Strategic compensation planning

- Allows enterprise analysis of future projected costs
Module: Benefits

• Comprehensive administration of employee benefits:
  ✷ Health (medical and dental)
  ✷ Insurance (Life)
  ✷ Savings (Retirement) / 401-K
  ✷ Spending Accounts (Medical and Dependent Care)
  ✷ Vacation

• Concepts & processes to manage extensive and highly individual employee benefits packages
  ✷ Open Enrollment
  ✷ Employee Life-cycle Events (e.g. Marriage, Child, and Separation)
Module: Personnel Development

• Compare current or future work requirements with employees’ qualifications, preferences and aspirations
• Convert training proposals directly into bookings based on qualification deficits or needs
• Aligning employee goals with corporate goals
Module: Training & Events Management

- Plan and manage business events
  - Training
  - Conferences
- Interfaces with other R/3 components
  - Basis for extending and updating employee’s skills and knowledge
- Flexible Reporting
- Appraisal functions
  - Provide important decision support feedback to ensure the business events offered are both high quality and effective
Module: Time Management (TM)

• Flexible representation of personnel procedures to record and evaluate employee time data
  ✷ Infrastructure for time data recording
  ✷ Work schedules / shifts
  ✷ Record of planned attendance and absences
  ✷ Record actual attendance and absence (Time sheet)
  ✷ Annual and Sick Leave accrual
  ✷ Time evaluation

• Ability to transfer absence and attendance data to other SAP applications
Module: Payroll Accounting

- Process payroll using data from Personnel Admin, Benefits & Time Mgmt Modules
  - Payroll runs (regular and off-cycle)
  - Payroll corrections
  - Payments
  - Remuneration Statements
  - Posting to Financial Accounting
  - Third Party Remittance
- Tax Reporter generates all required state and federal tax forms (e.g. SUI reports & W-2s)
- Includes a number of standard payroll reports
- Configuration highly Country specific
HR: Other

- Travel Management and Expense

- HR Service Delivery (Improve access to information, services, transactions)
  ✦ Manager Self-Service
  ✦ Employee Self-Service
HR: Structures

Corporate Structure

Organization Structure

Personnel Structure
ECC: Enterprise Structure
HR: Corporate Structure

- IDES
  - United States
    - Los Angeles
    - Headquarters
  - U.K.
    - Chicago
  - Japan
    - New York
  - Germany
    - Atlanta
    - Production

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HR: Corporate Structure

- HR Corporate structure different than ECC Enterprise structure
- Personnel Area
  - Entity for personnel administration
  - Uniquely assigned to a company code
  - Default values for data entry
  - Authorization checks can be performed at this and company level
- Personnel subarea
  - Divides personnel area
  - Controls pay scale, wage type structures and work scheduled planning
  - Unique 4 digit code
HR: Personnel Structure

- Pensioners
- Active Employees
- Employee Group
- Hourly
- Salaried
- Employee Subgroup
- Bi-Weekly
- Weekly
- Payroll Area

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HR: Organizational Structure

Organizational Structure

Organizational Unit

Financial Operations

Accounting

Finance

Jobs

Controller

Manager

Clerk

Tasks

Scheduling

Reporting

Positions

Corp. Fin. Rptg Manager; Audit Manager – San Francisco; etc.
HR: Organizational Structure

• Organizational Key
  ✳ 14 character field for defining organizational and personnel structure

• Positions: Represent actual employee placements or vacancies
HR: Relationship of Objects

1. Organizational Management

- Enterprise Structure
  - Job
  - Organization Unit
  - Cost center

2. Personnel Administration

- Position
  - Text
  - Belongs to
  - Is assigned to or inherits

- Employee
  - Occupies

Default values from Organizational Management
HR: Infotypes

- Infotypes: information groups that store personal data
  - Controlled for scope and access authorization
  - Logical grouping of data fields on screen
  - 4 digit Infotype code

- Examples
  - 0001 - Organizational assignment (organizational unit, job)
  - 0007 - Work schedule (shift, time recording, work hours)
  - 0009 - Bank Details (account details to receive check)
  - 0021 - Family
  - Personal data (current name, name at birth)
  - Payroll status (last payroll, date for recalculation)
HR: Infotypes

Infotypes Are Logical Groupings of Data Fields
SAP Security – HR view

• Agenda
  – Few SAP Security basics
  – HR: Double Verification Principle
  – HR: PD Profile – Structural Authorizations
  – Position based Security
  – Position based vs. User based Security
SAP Environment Security Components

- Network Security
- Operating System Security
- SAP Application Security
- Workstation Security
- Database Security
SAP Security: Lock Concept

Key Slot

Lock: Authorization Object

Core: Authorization Checks

SAP Terminology
SAP Security: Key Concept

Lock: Authorization Object

Core: Authorization Checks

Key Slot

Key

Authorization Values

SAP Terminology
SAP Security

Object class

Authorization Object

Authorization Checks

Profile

User

Financial Accounting

Human Resources

Authorization for company code: F_BKPF_BUK

T_9002039701

Fields

Values

... Authorization Values

T_580000097

User Master

Peter Maier

T_580000097
HR Security: Sample Authorization Object

Object: P_ORGIN (for HR Master Data)
Authorization: P_ORGIN

<table>
<thead>
<tr>
<th>Field</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization Level</td>
<td>R, E, D, M, S, W or *</td>
</tr>
<tr>
<td>Infotype</td>
<td>*</td>
</tr>
<tr>
<td>Employee Group</td>
<td>*</td>
</tr>
<tr>
<td>Employee Subgroup</td>
<td>*</td>
</tr>
<tr>
<td>Organizational Key</td>
<td>*</td>
</tr>
<tr>
<td>Personnel Area</td>
<td>*</td>
</tr>
<tr>
<td>Personnel Area Subtype</td>
<td>*</td>
</tr>
</tbody>
</table>

Also requires transaction code (P_TCODE) authorization
  e.g. PA20 (display HR Master data), PA30 (maintain master data)
HR Security: Authorization Field

• Authorization level field values outside HR are numerical values

• HR Specific authorization levels:
  ▪ R  Read
  ▪ E  Write to a locked record
  ▪ D  Lock / unlock record
  ▪ M  Display matchcodes
  ▪ S  (Symmetric) Write to a locked record; unlock IF the last person who used the record is NOT the current user
  ▪ *  All activities
HR Security: Double Verification Principle

Authorization Level

E – write to locked record

Maintain
Create (Lock is set)
Change / Delete (only locked records)

D – Lock / Unlock record

Lock

UnLock

Asymmetrical Double Verification
HR Security: Double Verification Principle

• Protect critical infotypes by segregating data entry and data control responsibilities among two (2) people.
  ♦ No single person can change critical values (e.g. base pay)

• Asymmetrical Double Verification: 2 users don’t have same authorization
  ♦ **New data**: User A enters new data; User B unlocks it
  ♦ **Existing data**:
    - User B locks; User A changes data; User B unlocks
    - User A creates locked copy and then changes; User B unlocks this data.
  ♦ **Delete data**: User B locks the data; User A deletes it.

• Symmetrical Double Verification: Both users have level S
  ♦ Each user can lock, change, relock data records
  ♦ Can unlock only if not last person to have changed locked data
HR Security: Structural Authorizations

• End User inherits HR security access only to the organizational units (or departments) that have been assigned to them

• PD Profiles / Structural Authorizations
  ✧ Defines additional level of security access by Organization
  ✧ Confines users to perform tasks within specific organization layers
  ✧ Used *in conjunction* with standard SAP profiles (lesson 7 - 10)
  ✧ Created in config vs. security profile generator
  ✧ Assigned to individual users via linking to positions (infotype 1017)
  ✧ Only used while accessing HR data
Position-Based Security Concept

• HR module used to help Security Administrators control system access
• Roles and activity groups or authorization profiles (standard and structural) are attached to positions or other objects in the organization structure
• The person who holds / occupies the position inherits access provided by the profiles or activity groups
• When people move within the organization, no need to communicate with Security Administrators
User-Based Security Concept

- Security roles are directly assigned to user master records
- Accommodates traditional thinking: ‘Joe Smith approves purchase orders vs. Finance Manager approves purchase orders’
- Is only security approach possible with HR module implementation
- Requires matching job and position responsibilities to access requirements for each user
Position-Based vs. User-Based Security

• Position-based Security Benefits:
  ♦ Security based on employee’s position and how that position fits in the organizational structure.
  ♦ Aligns with business process thinking
    ▪ Payroll administrator starts and stops payroll vs. Joe Smith starts and stops payroll
    ▪ Workforce Planning Manager creates new positions vs. Joe Smith creates new positions
  ♦ Automates security adjustments triggered by employee’s long-term movement in organization (e.g. new hire,, transfer, termination)
  ♦ Lower long-term security maintenance and administrative costs despite the one-time development costs
Position-Based vs. User-Based Security

- Position-based Security Benefits:
  - Facilitate general assignments to employees whose positions belong to same organizational unit.
  - Base training and change management strategies on jobs and/or positions
    - In a course – train all HR Managers
    - Communicate business impact to all Personnel Administrators
  - Easier use of workflow
    - Workflow uses organizational structure to identify approving position(s). Position drives approval and not the holder of the position
    - Position-based security similar to position-focused Workflow (chief positions). Activity / processing centered around
Position-Based vs. User-Based Security

• Position-based Security Cautions:
  ┇ How to handle non-employees (contractors, consultants, third-party)?  User-based security most likely implemented – no positions for third-parties.
  ┇ When roles (activity groups) used for position-based users, security assignment can also occur directly in user master record.
    ▪ Most effort defining, creating the activity groups
  ┇ Challenging for fuzzy, complex, dynamic organizations
    ▪ **Fuzzy**: structure is flexible (can depend on individual in position) or varies significantly in different parts of organization
    ▪ **Complex**: matrix organizations, few or very many levels of organization more difficult to model in SAP HR Structure
    ▪ **Dynamic**: if organization changes frequently, position security reorg is required to support
Purchase-to-Pay Exercise

• Primary Learning objectives
  – Experience the steps in a typical purchasing transaction
  – See how an ERP system handles typical purchasing transactions
  – Work through the procedures involved in a test of transactions
  – Investigate related application controls in an ERP system

• Secondary learning objectives:
  – See the integration between materials management (MM) and financial accounting (FI) modules of SAP
  – View some basic FI module settings than enable proper system functions
Exercise 1: Purchase to Pay

• Agenda
  - Today: Logging On; Steps 1 - 6
  - Next Class (Feb 2): Steps 7 - 14
  - Due Feb 5 11:59 PM: Assignment Submission
Configured SAP Gui

Select System: double-click or Logon button
Logging On

Enter Client
Enter User (R/3 Account)
Enter Password (R/3 Account)

Don’t worry about language—English will default in
# SAP Access Details

<table>
<thead>
<tr>
<th>SAPGUI - System ID</th>
<th>GB5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host Name</td>
<td>GB5.UCC.UWM.EDU</td>
</tr>
<tr>
<td>Client Name</td>
<td>SAP ERP GBI AIS 2.21 (MCC)</td>
</tr>
<tr>
<td>Client Number</td>
<td>648</td>
</tr>
<tr>
<td>SAPGUI - System Number</td>
<td>00</td>
</tr>
<tr>
<td>Student Userids</td>
<td>AIS-002 to AIS-029</td>
</tr>
<tr>
<td>Initial Student Password (case sensitive)</td>
<td>5121Temp</td>
</tr>
</tbody>
</table>
On the first time logging in to a new account, you will have to change the password—try To remember your new Password WITHOUT WRITING IT DOWN!

Then a message or two

Then . . . .
Success !!

SAP Easy Access
• Master Data Entry
• Transaction Data Entry
Enable ‘Expert’ Mode

Also: Extras -> Technical Details
Exercise 1: Purchase to Pay

- Agenda
  - Today: Tasks 1 - 6
  - Next Class (Feb 2): Tasks 7 - 14
  - Due Feb 5 11:59 PM: Assignment Submission
Exercise 1: Purchase to Pay

• Task 1.1 - Examine the Chart of Accounts
  – Menu: Accounting ▶ Financial Accounting ▶ General Ledger ▶ Information System ▶ General Ledger Reports ▶ Master Data ▶ Chart of Accounts
  – Transaction: S_ALR_87012326

• Task 1.2-3 - Examine General Ledger Accounts
  – Menu: Accounting ▶ Financial Accounting ▶ General Ledger ▶ Master Records ▶ G/L Accounts ▶ Individual processing ▶ Centrally
  – Transaction: FS00
Exercise 1: Purchase to Pay

• Task 2 - Examine System Settings
  – Menu: *Tools ➤ Customizing ➤ IMG ➤ Execute Project*
  – Transaction: *SPRO*

*Do not make any changes to the system while you are in the IMG.*


• Task 3 - Create a Master Material Record
  – Menu: *Materials Management ➤ Material Master ➤ Material ➤ Create (Special) ➤ Trading Goods*
  – Transaction: *MMH1*
Exercise 1: Purchase to Pay

- **Task 4 - Create a Vendor Master Record**
  - **Menu:** Logistics ➤ Materials Management ➤ Purchasing ➤ Master Data ➤ Vendor ➤ Central ➤ Create
  - **Transaction:** XK01

- **Task 5 – Create Information Record for the Vendor/Material**
  - **Menu:** Logistics ➤ Materials Management ➤ Purchasing ➤ Master Data ➤ Info Record ➤ Create
  - **Transaction:** ME11
Exercise 1: Purchase to Pay

- Task 6 - Check Status of Various Accounts
  - Check Inventory: MM Inventory Quantity
    Transaction: **MMBE (Stock Overview)**
  
  - Check GL Inventory, GL Cash, GL A/P, GR/IR (Goods Received / Invoice Received):
    Transaction: **S_ALR_87012291 (Line Item Journal)**
  
  - Check A/P Vendor sub-ledger:
    Transaction: **FBL1N (Vendor line item display)**
Extra Slides
How the Fraud took place (con’t)

• Operating Expenses to Assets
  - CFO’s directions affected the balance sheet:

  Assets:
  - Computer assets + xxx (Huge Increase)
  - Leasing assets + xxx (Huge Increase)

  Liabilities: xxx (no change)

  Stockholders Equity:
  - Retained Earnings + xxx (Huge Increase)

  = HAPPY INVESTORS
HR: Relationship of Objects
Object-oriented design - relationships

- Organizational unit
  - Cost center
  - Job
    - Position
      - Work center
      - Task
        - Person
          - Holder
            - External OT
Additional HR Terms: subtypes, objects

Infotype 0021
‘Family’

Object ID 1: ‘Chuck’

Object ID 2 ‘Diane’

Subtype 1
‘Spouse’

Subtype 2
‘Children’