Session No: I-4

SAP at the Center of TEDU Enterprise Application Architecture

TED University
by Umut Rodoplu
About TEDU

- Located at the heart of Ankara
- Young, dynamic and modern University
- 88 years of education experience with TED
- Liberal education
- Currently 1600 students, targeting 5000
- 190 Academic & Administrative Staff
SAP at TEDU

• SAP is core information system for TEDU
• Implementation project started January 2012
• First go-live August 2012
  – SLCM (With limited functionality), FI-CA, FI, CO, Payroll, HR, PM, MM, SD
• Which modules are implemented?
  – SLCM, FI-CA, BO/BI, BPC, CRM, FI, CO, Payroll, HR, PM, MM, SD
SAP – Web CMS (Drupal)

- Program Curriculum
- Course Descriptions
- Course Profiles
- Semester Courses Offered
SAP – Web CMS (Drupal)

- Web Services
- Daily Data Transfer
- Bilingual (English / Turkish)
SAP – Web CMS (Drupal)

Program Curriculum

• Undergraduate Program (Department Web Sites)
• Graduate Program (Program Web Sites)

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<th>Code</th>
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Totals expected for graduation: 98 C, 78 P, 2 L, 138 Cr, 240 ECTS

C: Class Lecture, P: Practice, L: Laboratory, Cr: Credits, ECTS: ECTS Credits
SAP – Web CMS (Drupal)

Course Description

• Courses offered by department or program
• B 501 (is offered by) relationship between course and department
Course Profiles

- Courses offered by department or program
- B501 (is offered by) relationship between course and department
- A090 (is responsible) relationship between course and course coordinator
- Web edit authorization based on A090 relationship
Courses Offered

- Courses offered by department or program
- Current semester listed as default
- Previous semesters can be selected from dropdown
- Filter option for courses
- Student statistics based on registration and evaluation
Faculty Member Personal Pages

- Courses offered by academic Staff
- Syllabus upload authorization based on assigned resource to event package
SAP – Web CMS (Drupal)

TEDUCard is a university ID card provided to faculty, staff & students also used as a smart card with its e-wallet feature.

- Access control and payment services within the university
  - Security gate pass
  - Cafeteria, Canteen, Bookstore, Library

- Infrastructure and operation managed in cooperation with bank
SAP - TEDUCard

- Web Services
- Online Data Transfer
- Students can track account balance and transaction history via MyTEDU Portal
Next step will be transfer of faculty, staff & student master data from SAP to TEDUCard system.
SAP – Library Automation (SirsiDynix)

- Late fee payments
- Book loan query
- Late fee query
SAP – Library Automation (SirsiDynix)

- Web Services
- Online Data Transfer
SAP – Library Automation (SirsIdynix)

- Book loans are tracked in Library Automation System
- As a result, late fees are also calculated on Library Automation
Late fee payments are transferred from Library Automation to SAP (both library loan and payment record)
SAP – Library Automation (SirsiDynix)

• At graduation or deregistration book loan and late return fee are checked automatically by the system
• Customer status «Library Loan» assigned for further tracking
• Process not blocked due to graduation diploma printing
SAP – RFID Asset Tracking

- Asset data is tracked within SAP as equipments and rooms are defined as installed locations.
SAP – RFID Asset Tracking

- Custom development in SAP for equipment debit tracking
SAP – RFID Asset Tracking

- Equipment Debit Report for Asset Admin
### Equipment Debit Report

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SAP – RFID Asset Tracking

• Scope of integration
  – Equipment master data
  – Location master data (hierarchical)
  – Organization structure
  – Employee master data
  – Count results
    • Location change
    • Debit change
    • Lost equipment

• Web services

• Data transfer manually triggered
SAP – RFID Asset Tracking

SAP -> RFID Asset Tracking System

- Equipment master data
- Location master data (hierarchical)
- Organization structure
- Employee master data

Label Printing (Asset & Location)

Asset Count
SAP – RFID Asset Tracking

- Asset Count with hand terminal
RFID Asset Tracking System -> SAP

( Count Results )

Change Debit Location
Lost Equipment

Change Equipment

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TEDU Enterprise Architecture

**Business Applications**
- TEDUCard
  - Payment / Charge Transactions
  - Card Balance
  - Student/Staff Master Data (Future)
- Web CMS (Drupal)
  - Semester Courses Offered
  - Program Curriculum
  - Course Profiles
- SAP IS-HER
- SAP BO
- SAP Basis
- SAP BPM
- Library (SirsiDynix)
  - Late Penalty Payment
  - Loan Check
- Asset Tracking
- Moodle LMS
  - Semester Courses Offered
  - Class Roster
  - Course Grades

**External Systems**
- Student Registrations
  - YOKSIS (Council of Higher Education)
  - Currency Exchange Rates
  - CBRT (Central Bank of Turkey)
  - Equipment Data Count Results
  - Student Loans Loan Payment (3dIP, 3dSecure)
- Banks

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SAP – External Systems

YOKSIS
Council of Higher Education in Turkey
Information System

- Student master data
- Student registration
- Alumni

- Web Services
- Daily Update
SAP – External Systems

Partner Banks

• Student loans and payments through ATM, bank branch or online banking
  ✓ sFTP
  ✓ Daily data transfer

• Online credit card payment via virtual POS
  ✓ SSL
  ✓ 3D Secure
  ✓ Online data transfer
SAP – External Systems

CBRT
Central Bank of Turkey

• Currency Exchange Rates
• XML Service
• Daily Transfer
Lessons Learned

• Select best-of-breed software
• Master data synchronization for;
  – Avoiding manual duplicate data maintenance
  – Avoiding data inconsistency
• Integrate business processes for;
  – Validation
  – Creation of master & transactional data
• Use of standart & proven technologies
Future Plans for Integration

• Transfer of faculty, staff & student master data from SAP to TEDUCard system
• Moodle LMS & SAP;
  – Courses
  – Class Roster
  – Grades
Future Plans for SAP

- Upgrade to EHP 7 SPS 11
- Upgrade to NW 7.4 SPS 14
- Fiori
- CRM for alumni tracking
Thank You..!

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