Focus on the Future

Automotive Research Conferences

The business of IT: Transforming the Organization and the Vehicle

Paul Skornia  (pskornia@lear.com)
Manager, Information Systems
Electrical & Electronics Division
Lear Corporation

September 22, 2009
Agenda

- Lear – Brief Overview
- What is ERP?
- Top 5 ERP challenges
- Lear’s use of QAD’s ERP system to meet these challenges
- Project management for IT: It’s all about 3 things…
Lear Profile

- One of the largest automotive suppliers
- 215 facilities
- 34 countries
- More than 90,000 employees
Electrical Distribution Systems

Wire Harnesses

Power Wired Boxes

Smart Junction Boxes

Mechatronics & Light Switch Center

Terminals & Connectors

Power PCB Boxes

Power Management Modules: SOC & SOH

FFC Technology
Wireless Products

- RKE With Immobilizer Transmitter
- Passive Keyless Entry Transmitter
- Tyre Pressure System Receiver
- Remote Keyless Entry Transmitter
- Remote Key Less Entry Receiver
- Tire Pressure System Transmitter
What is ERP?

- Common functions of an ERP (Enterprise Resource Planning) system at Lear
  - Customer order management
  - Inventory control
  - Bills of materials & routings
  - Production & material scheduling
  - Purchasing
  - Financials (AP, AR, costing, general accounting)
  - Electronic communication (EDI) with customers & suppliers
  - Shop floor bar code scanning
- QAD is an ERP provider for Lear’s Electrical and Electronics division
- Typical ERP usage
  - 100 – 150 users per site, 500+ menu functions, half million transactions per month
Objective of this session

Show how Lear has used QAD’s ERP system to meet TOP 5 IT challenges
Top 5 IT challenges with ERP

**CHALLENGE #1:** Implementing common processes
- About 90 processes per plant (100-150 users)
- Minimize "one off" processes
- Do 1 implementation 10 times, not 10 implementations 1 time

**CHALLENGE #2:** Reducing implementation time
- Reducing training time
- Minimizing software modifications
- Controlling project scope

**CHALLENGE #3:** Reducing post launch challenges
- Call backs for more training
- Employee turnover
- Maintaining data integrity
- Support calls
- "The sun never sets..."
- Limited staff, more locations
- Global operation

Mind map by FreeMind
Top 5 ERP challenges (continued)

General ERP challenges

CHALLENGE #4: Meeting the business need WITHOUT modifying the software

- No "intrusive" code changes.
- No changes that will make future software upgrades more difficult
- Don't try to solve all your problems with your ERP system
- Data Warehouse?
- PC based application?

CHALLENGE #5: Staying on current software release levels

- Minimizing customization
- Implementing common processes

Database changes
Screen changes
How Lear is meeting these challenges with our QAD ERP system

- Part 1: Process maps
- Part 2: Browses
- Part 3: Training materials
Part 1: Process Maps

What they are:
- Visual process displays
- Contain links to necessary screens or reports
- Contain links to training materials

Benefits:
- Reduce training time
- Promote common “ways of working”
- Promote enforcement of disciplines
  • Daily tasks, weekly tasks, monthly tasks
Example #1: Generic process maps

Sample of a QAD provided “top level” map
Example #2: Lear’s “Roles Based” approach

Roles Based Process Map

MAIN MENU

1. This MAIN MENU appears when users sign on
2. OBJECTIVE: Organize the process maps and tasks (daily, weekly, monthly, as-needed) into a Roles based format
3. BENEFIT: Reinforces training and reduces time searching for procedures related to business process

General Inquiry

Daily tasks

Weekly tasks

Monthly tasks
Example #3: Roles for functional areas

Goal is to promote discipline by clearly showing “regular” tasks
- Daily task, weekly tasks, monthly tasks, and “as-needed” tasks
**Example #4: Daily tasks for customer service**

**Objective**
- List the tasks (left hand column)
- Show boxes for each step
- Provide links to training materials

**Task**

1. Verify that EDI releases were received as planned
2. Correct EDI errors (errors that prevented releases from loading)
3. Identify changes in customer demand
4. Check customer system (DDL, SMART, etc.) for any new requirements
5. Run the EDI error report (34.2.2.6)
6. Set-up customer part number (1.16)
7. Add parts & PO's to scheduled sales order (7.3.13)
8. Inactivate any old PO numbers on the scheduled sales order
9. Reissue any failed EDI releases (35.9.21)
10. Update the Required Ship Schedule (7.5.5)

**Steps to accomplish each task**

- 1. Check customer system (DDL, SMART, etc.)
- 2. Verify that all customer requirements are loaded into QAD (34.2.2.1)
- 3. Check releases in Covariant Connect
- 5. Run the EDI error report (34.2.2.6)
- 6. Set-up customer part number (1.16)
- 7. Add parts & PO's to scheduled sales order (7.3.13)
- 8. Inactivate any old PO numbers on the scheduled sales order
- 9. Reissue any failed EDI releases (35.9.21)
- 10. Update the Required Ship Schedule (7.5.5)

**Training**

4. Training Materials
11. Training Materials
13. Training Materials

**TOOL Tip function to show brief text describing option**

**Note:** This is the screen for setting-up a new customer part number in QAD. Consequences of not setting-up a customer part in QAD:

- CONSEQUENCE #1: EDI releases will not load
- CONSEQUENCE #2: Raw material will not be scheduled with suppliers
- CONSEQUENCE #3: Production will be delayed
- CONSEQUENCE #4: Missed shipment to the customer
Example #5: Applying the swimlane concept

**Swimlane objectives**
- Show tasks done by multiple people
- Show sequence of tasks
- Show “hand-off” to next person

**Additional Lear objective**
- Reduce training time
  - Links to QAD training materials
  - Links to training materials on potential problems to watch for
Part 2: Browses

Problem: Too many custom reports; too much paper
- 40% of custom code is for reports
- Too many “ream size” reports

Solution: Use Browses in place of reports

Benefits for IT
- Single browse can replace multiple reports

Benefits for users
- Ability to sort, filter, hide data
- Single click dump to Excel
- Higher productivity
  - More efficient to view data in electronic form
Part 2: Browse – sample

- Single browse can replace multiple reports
- Single click extract to Excel
- More efficient to review data on screen than printed on “dead trees”
Part 3: ERP training materials

▲ Training challenge
- 90+ processes that “touch” QAD
- 500+ QAD screens
- 100+ users per location

▲ TOP 3 challenges with training materials
- Keeping materials updated
- Finding training materials when you need them
- Getting users to actually use them

▲ System is only as good as the people who use it
Training materials: Three objectives

OBJECTIVE #1: Keep it short
- Users too busy for long training sessions
- "We gotta business to run"
- 50 page PowerPoints too overwhelming
- GOAL: 1 or 2 page "task specific" documents
- Avoid dusty binders on a shelf
- Eliminate searching for training materials

OBJECTIVE #2: Use a database tool to create training materials
- Chose Interspire KnowledgeManager
- Inexpensive
- Easy to create & update training materials
- Easier than managing 100's of PowerPoint documents

OBJECTIVE #3: Train on what can go wrong
- How to prevent problems in the first place?
- How to correct problems when they do happen?
Links to training materials on Process Maps

Objectives:

- Provide links to short, “task specific” training materials
- Provide training on potential problems to watch for
Using a database tool for training materials

Interspire KnowledgeManager

Ability to create training “articles” within an SQL database

Benefits
- No individual training documents to manage
- Process Maps link directly to training “articles”
- Easy to find & update materials

Knowledgebase Home > 2. Customer order management > 2.1 Set-up

ADDRESSES: How to set-up a new SHIP-TO address in QAD?

Step 1: Click on the link below to go to the Lear Treasury Accounts Receivable website and select the option to set-up a new customer
   Click here to go to the Treasury website

   Alternate method for getting to the Treasury website:
   Go to http://learn.lear.com/
   Choose Forms on the right to display a selection list
   Click on AR Cust. Maintenance
   Click on Add New Customers

Step 2: Fill-in the required information (anything with a check mark)
   Notes:
   1) BILLING SYSTEM enter QAD

Step 3: Wait a few days for the Accounts Receivable group to set-up the QAD ship-to ID in your database.
Project management for IT: It’s all about 3 things...

1. Managing expectations
   - Don’t oversell the product
   - Don’t promise what you can’t deliver

2. Managing risk
   - Stuff happens...be prepared for it

3. Process
   - Good software + bad processes = bad implementation
   - We aren’t implementing software, we are implementing business solutions
Questions?