FIT3138 Real-time Enterprise Systems

Tutorial 8

Process Modelling and Improvement and ERP Implementation

Objectives:

- Develop a swim lane process map
- Develop an event process chain (EPC) diagram of a basic business process
- Discuss workflow management

Exercises:

1. Develop a swim lane process map for the online ordering process for Active Bicycle Company, shown below. Each of the following functions should be one swim lane: sales, accounting, warehouse, and shipping.

The process begins when a customer submits an online order form to Active Bicycle via the Web. The customer supplies his or her name, address, email address, model number of the bicycle they desire, and credit card number.

When the customer clicks on the Confirm button on the Web page, Active Bicycle's system gets approval for the transaction from the credit card company. If the credit charge is approved, the system assigns a number to the sales order, displays an order summary for the customer to print, and sends a confirmation email to the customer. If the credit charge is denied, the customer is asked to provide a different form of payment.

The system then generates a two-part invoice, a stock release form, and a two-part packing slip form. The stock release form is sent to the Warehouse Department, and the two-part packing slip and one copy of the invoice are sent to the Shipping Department. The other copy of the invoice is maintained in a holding file in the Accounting Department to be filed later with the shipping certificate.

In the warehouse, employees use the stock release form to pull the appropriate inventory to fill the order. Assuming there is enough stock (for the purposes of this exercise you can assume there is enough stock), the bicycle is packed into a special box for shipping, with added protection so it will not be damaged in transit. Using the stock release form, the warehouse staff inputs data into the inventory management program to update the master inventory file. The warehouse clerk also must take the information from the stock release form and manually fill out a shipping certificate, which is sent to the Accounting Department for a further check that the items are being released from the warehouse. The boxed inventory is then sent to the Shipping Department.

In the Shipping Department, one copy of the two-part packing slip, together with the invoice, is included with the boxed inventory to be sent to the customer. The other copy of the packing slip is placed in the shipping department's file cabinet.

Back in the Accounting Department, the shipping certificate is matched with the copy of the invoice, and the accounting database is updated to record the completion of the order. The accounting program then submits a payment request to the credit card company, and both the shipping certificate and the invoice are filed in the accounting office.

2. Develop an event process chain (EPC) diagram for the following staff-recruiting process at Yellow Brook Photography:

The current recruitment process for Yellow Brook Photography takes approximately 90 days. It begins when a manager completes a requisition and sends it to the Human Resource Department. The Human Resource Department reviews and assigns a number to the requisition and returns it to the manager for approval. He or she approves it, obtains the required approval signatures, and then returns it to Human Resource.

Next, Human Resource creates a job posting and announces the position internally through the company's intranet, bulletin boards, or a binder of current job openings. Human Resource collects responses internally for eight days. After that, Human Resource solicits résumés from external sources by advertising in newspapers and online. Human Resource then pre-screens the résumés and forwards information on qualified candidates to the hiring manager for review. The hiring manager tells Human Resource which candidates should be interviewed. Human Resource conducts brief phone interviews of candidates recommended by the hiring manager; if the phone interview is promising, Human Resource schedules an on-site interview. Candidates interview with the hiring manager and with a Human Resource staff member. Human Resource records the interviews in an applicant flow log.

Once a candidate is selected for hire, Human Resource and the hiring manager prepare an offer, and a background check on the candidate is initiated. Then, the hiring manager must approve the offer and obtain the required approval signatures on a job offer approval form. Subsequently, the hiring manager extends the offer verbally to the candidate, while Human Resource sends the written offer, including an employment start date. Once the applicant accepts the offer, a drug screening is scheduled for the candidate, who must also sign the offer letter and return it to Human Resource. At that point, Human Resource notifies the hiring manager of the candidate's acceptance. Finally, if the drug test comes back negative, the new employee completes new-hire orientation on the first day of work.

3. Workflow Management.

Watch the youtube video on workflow management and then answer the questions (6.28m)

http://www.youtube.com/watch?v=3KJjKY8k9Lk&feature=related

Answer the following questions:

- 1. What is workflow management?
- 2. Which terms are used to explain workflow management
- 3. Give an example of a workflow
- 4. What were the three processes they identified
- 5. The video referred to issues with the process steps within the process: what were the four issues
- 6. What is the goal of workflow management